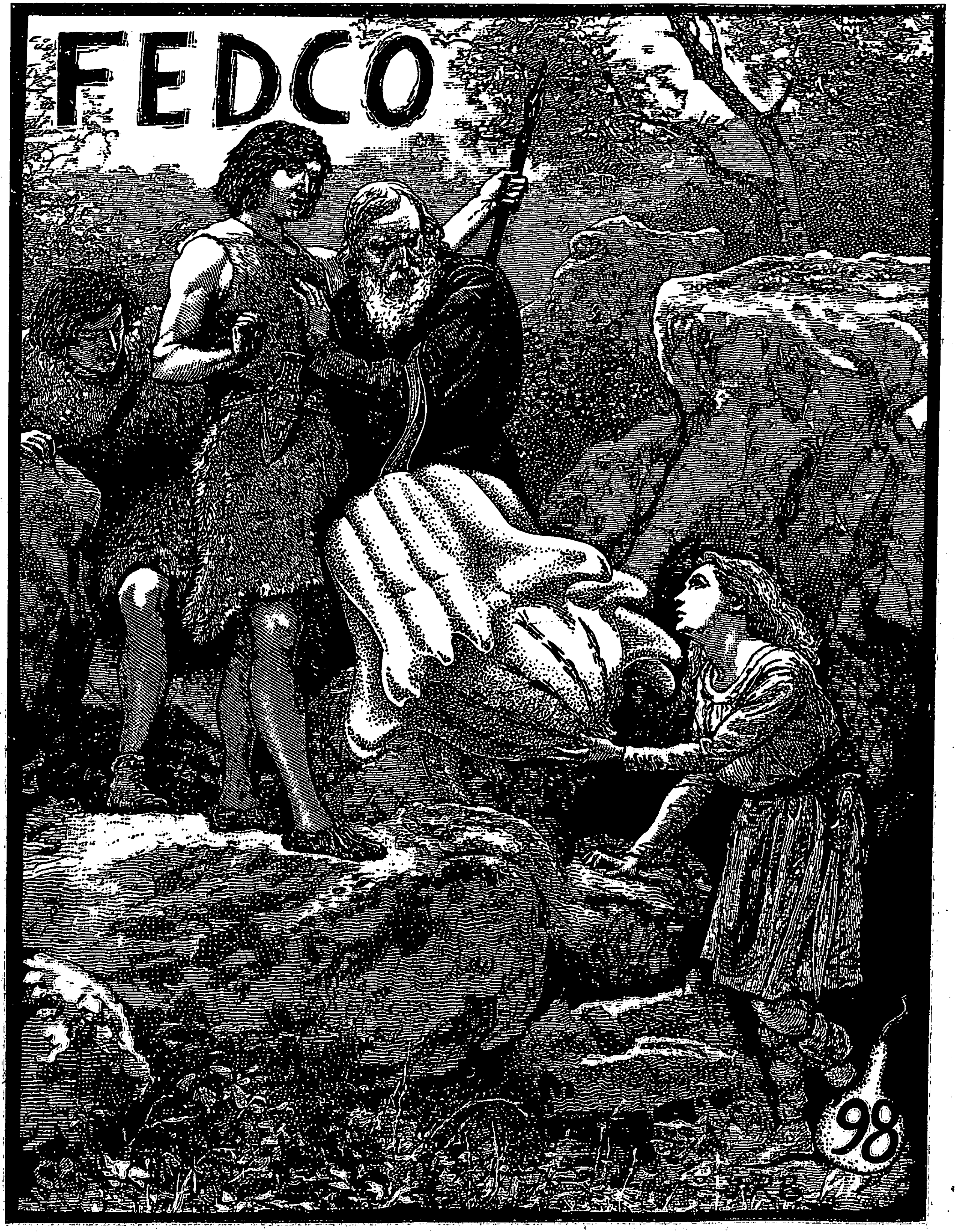
FEDCO



Fedco Seeds
Moose Tubers
Organic Growers Supply

For **Seeds**, see page 8.
For Books, see page 57.
How to order seeds and books, see page 5.
For **Moose Tubers** seed potatoes, see page 65.
How to order Seed Potatoes, see page 63.
For **Organic Growers Supply**, see page 72.
How to order OGS, see page 70.
For Order forms, see page 42B-H
For **Seedlings**, see page 42B.
For a Full Index, see the back cover.

Because of our pricing structure, our seeds are not arranged in alphabetical order, but instead according to seed size and botanical families. We have added botanical names for vegetables this year.

A Fedco Primer for New Friends and Old

Fedco has four divisions: Seeds, Moose Tubers and Organic Growers Supply, Trees, and Bulbs, and sends out three catalogs annually. This catalog contains descriptions and order forms for Seeds, Moose Tubers, Organic Growers Supply, and seedlings.

We work out of two warehouses located two miles apart in Clinton, Maine. Seeds are on the ground floor of our converted chicken barn on the Upper Bellsqueeze Road, and trees are in the basement. Seed potatoes and supplies for organic growers are in our rented facility on Baker St.

Our business office is in nearby Waterville. We do not have a retail store. We deal exclusively by mail and fax order except during designated pickup and public sale days and our annual excursion to the Common Ground Country Fair.

In our part of the world frosts occur nine months of the year and the ground remains frozen for about five months from late November until mid-late April.

Trees are alive, highly perishable, are dug in the spring after the ground thaws, must be kept cool and wet and cannot freeze. So we ship trees only in the spring.
Perennial plant crowns are alive, perishable, must be kept cool and cannot freeze, and are shipped in early April for potting up.
Fall bulbs are alive, perishable, need to be kept cool but cannot freeze, and must be shipped just before planting in fall.
Seed potatoes and onion sets are alive, perishable, must be kept cool but cannot freeze, and must be shipped in spring after frost.
Seeds are alive, dormant, must be kept cool and dry, may freeze if kept dry. Most customers want them as soon as possible in late winter/early spring before the ground has thawed.
Supplies are not alive and may be shipped at any time.

Because they work out of separate warehouses and/or have separate shipping schedules, each division has its own order form. Your cooperation in using the proper order form for each division will save us time and money, helping us to keep prices low. Please do not mix orders from separate divisions on one form. However, we encourage you to send in separate orders from more than one division at the same time so as to avoid the small order handling charge and to increase our efficiency in processing your orders.

The chart on page 4 summarizes our schedules.

Welcome to our 20th annual garden seed order!

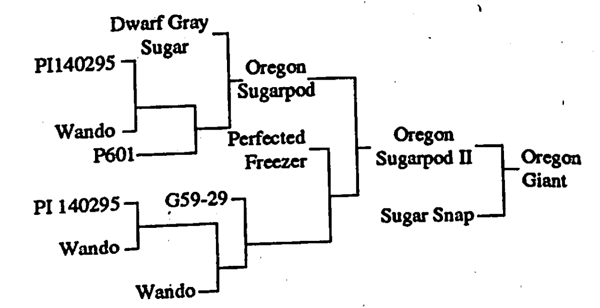
Yes, its been twenty years since CR Lawn, working with the now defunct Maine Federation of Co-operatives and the still-thriving Maine Organic Farmers and Gardeners Association, founded the Fedco garden seed co-operative. When the work is good, the time passes quickly. Much has changed during our two decades of steady growth. We have sprouted three additional divisions and added hundreds of new and old varieties. The original selection of six tomato varieties has increased to 46, the two peppers have mushroomed to 34, the four lettuces have burgeoned to 46! Much remains the same—we still carry 45 of the original 80 varieties we offered in 1979. Our philosophy has remained even more constant: We strive to fill your orders accurately with high quality seeds at the lowest possible prices.

Cover:
Belarius: By Jupiter, an angel! or, if not, an earthly paragon! Behold divineness no elder than a boy.
Imogen: Gourd masters, harm me not...
Shakespeare, *Cymbeline* III, vi, 42

New Seed Varieties for 1998

Highlights: A new line of hardshell gourds grown in Hungary. Two radishes and a kohlrabi for winter storage. Two supersweet corns. Five new peppers. And exciting heirloom tomatoes!

271 Buttercrisp: Get the butter taste without the butterfat!
448 Cannellini: Beautiful soup, who for such delicacies would not stoop?
478 Bumblebee: No sting to this baking bean!
479 Red Chili: As a base for chili, it beats 'em all silly!
546 Kandy Plus: Best-looking ears of corn we've ever seen!
559 Jubilee: Celebrate its superb supersweet taste!
580 Seneca Appaloosa: Ride this bicolor for lasting sweet flavor!
678 Robust: As Johnny Most would have said, it stops and pops!
818 Oregon Giant: Giant pods, giant taste, giant breeder!



908 Jenny Lind: Sing for its sweet green flesh!
1098 Burpee Early Hybrid Crenshaw: One taste will banish meloncholia!
1396 Holland: Not a burp in a bushel!
1764 Chinese Bottle: The highlight of my 1997 trial visits!
1772 Corsican Canteen: Let's drink to all the gourd growers!
1778 Siphon: A gourd swan to have in your garden!
1784 Maranka: A good weapon for #3387!
1790 Bushel: A test of growing prowess, try it and wow us!
1878 Honey Delight: Roberta Bunker's favorite winter squash!
2240 Hailstone: The only hailstones you'll ever want in your garden!
2268 Misato Rose: Don't be fooled by outward appearances!
2270 Black Spanish Round: Heirloom storage radish enjoyed for generations!
2358 Laurentian: Give a hoot for this Canadian root!
2476 Mars: Onions are from Mars, women from Venus!
2788 Esmeralda: A jewel of a butterhead lettuce!
2798 Webb's Wonderful: Twin to orb weavers who make wonderful webs!
2912 Speckled: Trout fishing in the lettuce patch!
2952 De Morges Braun: With colors so keen, it shimmers and sheens!
3008 Hopi Red Dye Amaranth: A color to dye for!
3034 Perpetual Spinach: Not hard to love this chard!
3036 Bright Lights: Johnny's lights 'em up for its 2nd AAS!
3385 White Russian Kale: Another wild one from Frank Morton!
3387 Cavolo Palmizio: Refugee from Jurassic Park?
3392 Gigante Kohlrabi: Not woody, not tough, just the right storage stuff!
3506 Columbia: The gem of the cabbage patch!
3702 Greygo Baby: This baby wins favor with flavor!
3756 Bulgarian Carrot Chile: Shape like a carrot; heat like a chile!
3815 Fat 'n Sassy: Grow Fat 'n Sassy for peppers classy!
3897 Some Like it Hot Mix: We'll make the right picks for a pungent mix!
3906 Turino: Red roaster, red roaster will make you a boaster!
3976 Paprika Fire: Get hooked on these pointy peppers!
4048 Pruden's Purple: Better than Brandywine? Join the debate!
4068 Pineapple: Is it a pineapple, a tomato, or a mutant fruit?
4112 Cosmonaut Volkov: You don't have to fall out of the sky to enjoy these!
4150 Soldacki: The Poles know how to grow a good slicer!
4163 Aunt Ruby's German Green: You won't believe how good it is!
4167 Schimmeig Striped Hollow: The legend of Schimmeig Hollow!
4177 Ciudad Victorio: Lots of good raisins to grow this currant tomato!
4205 Early Girl: The early girl gets the market!
4450 Lime Basil: If you've got the thyme, we've got the lime!
4774 Narrow-Leaved Coneflower: Important Native American medicinal!
4866 Marshmallow: Velvet leaves to soothe and soften tissues!
4984 Valerian: Your garden will be a pink sea of tranquillity!
5068 Basketflower: Give a whistle for thornless thistle!
5110 Chinese Forget-Me-Not: You'll never forget these blue beauties!
5212 Fairy Bouquet Mix: Entice the plant fairies to your garden!
5228 Aurora Fire: Aurora is a burning thing. Makes a fiery ring!
5240 Striped Marvel: This marigold jumped from the pages of Marvel Comix!
5362 Salvia patens: Bright blue blossoms for your beds!
5363 Signum Blue Salvia: Plant these blues to drive away the blues!
5410 Lemon Queen: The Lemon Queen attacks the Black Knight!
5439 Sunflower Sampler: A bunch of sunnies for one money!
5441 Cupani: Most fragrant of all sweet peas!
5522 Chick-a-Biddy: It will climb, it will twine, its purple trumpets will shine!
5601 Ornament Gem: Maroon jewels for your mesclun!
5662 Cleopatra Salvia: Her bright scarlet blooms attract hummingbirds!
5668 Prado Red: Brings new colors to the sunflower patch!
5669 Prado Gold: All that glitters is Prado Gold!
6152 Black Hollyhock: Organically grown in the Maine foothills!

Dropped Varieties for 1998

580 Dawn: Its only grower ceased production.
678 White Cloud: Replaced by #678 Robust.
740 Patriot: Crop failure. We hope to have back in 1999.
968 Cream of Saskatchewan: Crop failure. We hope to have back in 1999.
1134 Golden Crown: Dropped by us for poor sales.
1984 Lady Godiva: Crop failure. We hope to have back in 1999.
2478 Southport Red Globe: No longer in production.
2488 Sweet Sandwich: Dropped in 1997. No longer in production.
2494 Mambo: Only treated seed was available. We replaced with #2476 Mars.
2846 Continuity: Dropped by us for poor sales.
3232 Tokyo Belle: No longer in production.
4250 Jet Star: No longer available to us.
4364 Earlirouge: Dropped by us. Others have more flavor.
5112 Merry Mix Chrysanthemum: Dropped by us for poor sales.
5362 Blue Bedder: Replaced by #5363 Signum Blue Salvia .
5570 Red Peacock: Crop failure. We hope to have back in 1999.
5602 Bonanza: Dropped by us. Will be replaced by a better variety in 1999.
5662 Carabiniere: Replaced by #5662 Cleopatra.
5922 Small Brome Grass: Dropped by us. Very poor sales.
5990 Silver Tip Wheat: Crop failure. Future plans undetermined.
6152 Watchman: Replaced by #6152 Black Hollyhock.

Last Chance in 1998 Available for the last time!

610 Burgundy Delight: The only grower is discontinuing production.
3422 Emperor: The only grower has discontinued production.
3960 Orobelle: The only grower has discontinued production.
6820 Early Chaca: No longer in production.
6846 Winter Bloomsdale: No longer in production.

A number of other items are in discounted specials. See page 62. Some of these are in short supply temporarily because of crop failures. Others we plan to drop in 1999 because we have found a superior replacement or because sales have been too slow to justify continuing them.

Changes for 1998!

•WE NOW ACCEPT ORDERS ON VISA AND MASTERCARD. For details please see page 5.

•WE NOW ACCEPT FAX ORDERS. See page 5 for details.

•WE'VE REDUCED OUR HANDLING CHARGE for orders under $50 to $3.

•YOU MAY NOW COMBINE ORDERS to reach $50, provided they are sent in one envelope.

•PRICES IN THE CATALOG ARE EASIER TO FIND. Vegetable prices are after each variety description. Herb and flower prices are in a box at the top of each page.

•WE'VE EXPANDED OUR SHORT ORDER FORM TO INCLUDE UP TO 49 ITEMS making it usable for about half our customers. We are now sending the long 14-page order form only to growers, group coordinators and others placing large orders. If you wish to order more than 49 items and weren't sent it, please request it.

•WE RECOMMEND GROUP COORDINATORS direct individual group members to use the short form and then collate all orders onto one long form.

•PRICES FOR BULK QUANTITIES are now in the catalog after each variety description.

Cooperation Works for Us

Because we do not have an individual owner or beneficiary, profit is not our primary goal. We are one of the few seed companies in the United States organized as a cooperative. Consumers own 60% of the cooperative and worker members 40%. Consumers and worker members share proportionately in the cooperative's profits through our annual patronage dividends.

Our cooperative structure gives workers a real voice in running the company and a real stake in its success. Cooperation has enabled us to attract and retain talented workers. Year after year our staff turnover has been very low.

Our company culture derives from our history as a cooperative. Our first customers were other cooperatives and we developed many of our procedures specifically to serve them. Although we have diversified in recent years, almost half of our business still comes from cooperative or group orders. Our dedicated group order coordinators are partners in our business.

The cooperative ethic recognizes that we are all in this together. What is good for our managers should be good for our workers and good for our customers and vice versa. Cooperation is a two-way street. We design our orders to encourage you to participate actively. When you follow our directions and meet our deadlines you are doing some of the work involved in processing your order and helping us keep our prices low and our service brisk. When you share your experiences with us, visit us at our warehouses and fair booth, and let us know what you need, you are a partner in strengthening our cooperative.

Make Cooperation Work for You

You can make cooperation work for you, too, by creating group orders which can take advantage of our substantial volume discounts. It is easy to form a group: Get together with friends, neighbors, co-workers or other members of your club, grange, MOFGA chapter, church or coop. Distribute catalogs to interested members as soon as you can. We'd be happy to send you additional catalogs or order forms if you need them. Choose someone to collate your members' orders into one combined order which you send to us. Use the volume discounts as a fundraiser or pass them on to those who do the work on the order. Schedule a work party after the seeds arrive to break down your group order into individual orders. For our updated pamphlet with more detailed "Information for Group Coordinators" send a SASE.

Services for Group Orders

In 1998 we offer several services for group orders. 1) We are sharing our form for collating EZ orders 2) We are keeping all orders over $300 separated by sections when we pull and package them. 3) Coordinators of large group orders might want to take advantage of our 7% solution. In exchange for 7% of your order total we will collate, pull, package and invoice your individual orders separately and make one shipment to you. Please call the office for more information.

Individual Orders Are Welcome, Too!

You don't have to be a member of a group or cooperative to order from us. Individual orders are welcome and comprise more than half of our 3,700 seed orders annually. Our short form 1020-EZ is customized for these orders.

How You Can Get More Involved

Tell us how our varieties performed for you. Did you especially like something? Was something disappointing? Let us know. Tell us why. Please include the specific variety and lot number. The more details you furnish, the more we can learn.

Suggest new varieties for us to carry. Be these heirlooms which have been rediscovered, new varieties from modern breeding programs, or old standbys we've overlooked, your suggestions always interest us. The more specific your opinion, the more useful to us. And please tell us whose seed you've been using.

Join our network of trial gardeners. We are interested only in experienced successful gardeners with good record-keeping skills. We discourage organic purists because often trial samples have been fungicide-treated by the supplier. For 1998 we are especially seeking trialers of carrots, cucumbers, flint and flour corns, broccoli and dry beans.

Send us seed of an heirloom variety which you think has commercial potential. We will grow it out to see if we agree. Our King of the Early Bean, Cracoviensis Lettuce and Cavolo Palmizio all resulted from this type of collaboration. Vegetable varieties must ripen quality fruit or seed pods in our short growing season, with outstanding taste and/or appearance. We especially welcome samples of neglected herbs or flowers such as single hollyhocks and old-fashioned scented sweet peas.

Send us your old seed catalogs or old classic references. We are in the market for seed catalogs before 1970 and old garden books, especially those with good black-and-white drawings. Thanks to Martha Gottlieb and Russell Libby for recent contributions to our library.

Customer Service and Information

For all inquiries, call our office at (207) 873-7333 (873-SEED).

Call us Monday-Friday, 9:30am-5pm, December-April.

We are also available at irregular hours the rest of the year. If you don't get a live person, please leave a message on our answering machine.

We will answer your questions or transfer you to someone who can. Please do not call our warehouses.

You can help us to reduce our error rate and ensure that you get the seeds you want the first time by double-checking your short order form to make sure that your catalog numbers, sizes and prices are correct. On the long form make sure that each circled item number lines up with each amount ordered.

To err is human. Although we strive for perfection, we always fall short. If you get a few packets of the wrong seeds, or are missing a few packets, please mail us the correction form which comes with your shipment. If you are missing a major piece of your order or get someone else's order, please call the office.

Our Mailing List

We share peoples' concern about the proliferation of junk mail, and we do not want to be a part of the problem. If we are sending you too many catalogs, let us know so we can save both trees and money.

From time to time we receive requests for parts or all of our mailing list. We never give out such information without your prior permission and we never give out the names of people who've asked for our catalog but have not yet ordered from us.

We commonly receive requests from individuals seeking other folks or established coops with whom to order. Less frequently, like-minded organizations ask us to trade names.

On the front of the order form is a place for you to indicate when, if ever, we have your permission to give out your name. Please tell us if we can give your name to other businesses or organizations, and/or to individuals seeking to form an ordering group or coop.

To Our Friends in Warmer Climates

We are located in zone 4, where we have about 100 frost-free days.

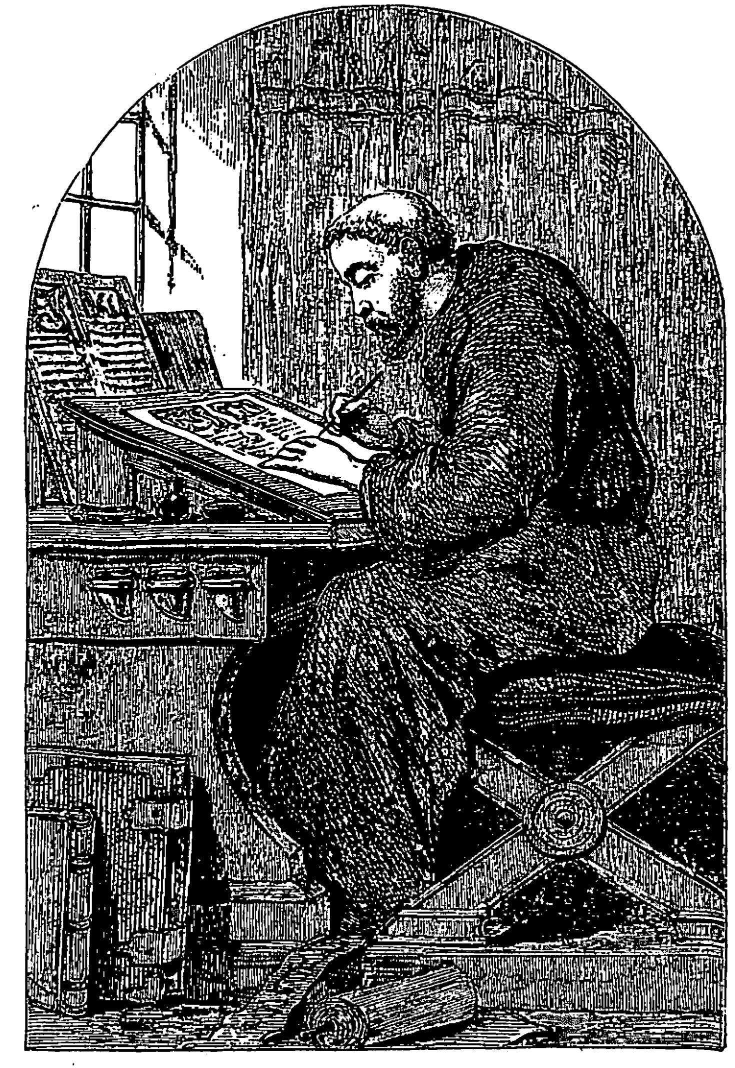
We've begun to receive requests for varieties and growing information for areas other than the Northeast. Because all our experience is in cold-climate gardening, and because we see ourselves as primarily a regional seed company, we have chosen to keep our focus on what we do best.

We will continue to limit our selections to proven performers in our cold climate. We won't recommend wintering-over varieties which can't survive our cold winters, even if they can make it through in regions with more moderate winters. Nor will we address problems caused by pests such as squash vine borer which are not prevalent in our area nor do we feel qualified to give advice about which varieties can be sown in early spring south of the Mason-Dixon line.

Many of our selections, including some rarely offered by other seed companies, thrive outside of our own region. We welcome your orders from the south, southwest, midwest and Pacific northwest. We suggest you find a supplementary regional seed source for varieties and information appropriate for your locale that are missing from our catalog. Thanks for your support.

Seeds People

Warehouse Coordinator: Gene Frey
Seed Catalog, Finance and Inventory Control: CR Lawn
Office Coordinator: David Shipman
Outreach: Joanna Clark
Office Crew: Cheryl Gariepy, Susan Kiralis
Packing and Germination Testing: Roberta Bunker
Purchasing and Research: Nikos Kavanya
Shipping: Alison LaCourse
Warehouse Crew: John Bunker, Carol Doyle, Paula Fulford, Paul LaCourse, Tom Levesque, Bernice Nadler, George Stewart, Ann Wilson



Fedco Seeds guarantees that all items we offer are fully satisfactory. If you are dissatisfied for any reason, we will either replace the item or refund the purchase price.

Limitation of Liability

Because good results depend upon weather, soil and cultural practices over which we have no control, we limit our liability in all instances to the purchase price of the seeds, as is customary in the seed trade. The liability of Fedco Seeds for breach of warranty, or any loss or damages arising out of the purchase or use of our products, including loss or damages resulting from any negligence whatsoever on our part, or strict liability in tort, shall be limited to the purchase price. By acceptance of the merchandise, the buyer acknowledges that the limitations and disclaimers herein described are conditions of sale, and that they constitute the entire agreement between the parties regarding any warranty or liability.

Claims for defects in Fedco Seeds' products should be presented to Fedco Seeds as soon as possible after discovery. Failure to assert claims within 30 days after discovery renders this warranty null and void.

Catalog	Goods offered	Coordinators	Forms available	Discount deadline	Ordering deadline	Shipments
Fedco Fall Bulbs	tulips, narcissus, crocus, hyacinth, iris, paperwhites amaryllis, seed garlic	Joanna Clark Gene Frey Roberta Bunker	June	mid August	late August	late Sept-early October
Fedco Trees	fruit trees, berry bushes, ornamental shrubs, grapes, conifers, nut & shade trees	John Bunker Roberta Bunker	October	December 5	March 13	late April
with Spring Bulbs	spring bulbs, perennial plants	Gene Frey Susan Kiralis	October	February 27	March 13	mid April
Fedco Seeds	vegetable, flower & herb seeds, books & seedlings	see table above	November	February 13	March 20 March 13 (seedlings)	mid January-late March May 1-3 pickup
with Organic Growers Supply	soil amendments, cover crops, garden tools & supplies	David Shipman Susan Kiralis	November	February 13	none	year round
and Moose Tubers	seed potatoes, onion sets	Alison LaCourse Paul LaCourse	November	February 13	Apr. 24 Feb. 27 for best selection	mid April

How to Order Seeds & Books

If we are new to you, or if you desire to refresh your memory about us, please see the Fedco primer on page 2.

All orders must be on one of our 1998 order forms. Use the simple order blank in the centerfold to order 49 items or fewer. Larger orderers please use the large grid order form. **Please, no lists.** All orders must enclose check, money order or credit card information. We do not accept food stamps. All orders must reach us by Fri. Mar. 20.

Mail us your order. Send to Fedco Seeds, PO Box 520, Waterville, ME 04903.

Fax us your order to (207) 873-7333. Please use one of our order forms. No lists. Fax orders must enclose credit card number and expiration date.

We accept VISA and MasterCard. We will bill your credit card at the time we receive your order. All adjustments and refunds will be by cash. To reduce our processing costs, we request all orders under $25 please pay with check or money order.

How Not to Order

Sorry, we do not accept telephone orders. These entail extra staffing costs and too many inaccuracies.

Sorry, we do not have a rush order service. We fill all orders in the order in which we receive them. We pledge to continue to reduce turnaround time for all orders. We take pride in our fairness, accuracy and promptness.

Deadlines

Orders received by:	qualify for:
Fri. Jan. 16	Early pickup.
Fri. Feb. 13	Volume discounts; regular March pickup.
Fri. Mar. 20	Final order deadline.

Why deadlines?

We reward large orders meeting our deadline with discounts because they help us determine with some precision the amount of seed we will need to fill the entire year's order and enable us to make additional purchases quickly before seed stocks run out. They also create economies of scale, enabling us to keep prices low.

Please don't procrastinate. We handle orders by the date they're received, not the date they're postmarked, and the postal service can be quite slow. Here are last recommended days to mail your order to reach here by Friday:

049 zip	mail by Thursday
elsewhere in Maine	mail by Wednesday
New England, NY	mail by Tuesday
outside NE, NY	mail by Monday

Shipping & Handling Charges

Orders under $50 must pay $3 for handling and shipping. You may combine with other order forms sent in the same envelope to reach $50. We pay for shipping on all other orders (except to Alaska; please pay 15% extra). Sorry, we can't ship to Canada. We welcome our neighbors in New Brunswick and Quebec to come pick up.

Discounts

All discounts are figured from the subtotal on page 1 of your order sheet.

Volume discounts: Orders received by Fri. Feb. 13 qualify.

Orders over $100 deduct 10%
Orders over $200 deduct 15%
Orders over $300 deduct 20%
Orders over $600 deduct 22%
Orders over $1000 deduct 24%

Pickup discount of 10%: Orders must be picked up in our warehouse at one of the designated pickup times (see Delivery Options for details).

Organic grower discount: Members of MOFGA, NOFA, PASA or a comparable organic growers organization receive a 1% discount regardless of ordering date. You need not be certified organic or a commercial farmer to take the discount, and you may join MOFGA or NOFA with your seed order. See page 7, Resources, for dues.

Sales tax

Maine residents pay 6% on flower seed and books. These items are highlighted on the totals page of the order sheet. **Please do not charge yourself sales tax on vegetable and herb seed.** Maine farms and retailers: Send us your state resale ID number.

There is no sales tax on anything for folks outside of Maine.

Bulk Orders

Bulk prices are now listed in the catalog after each variety description. If you wish a larger quantity of any item than listed, please call for a quote. Ask for CR Lawn.

List bulk orders on a separate sheet of paper; do not include them in the section totals on the grid order sheet. Instead, put the total for your bulk items on the line labeled "Bulk Seed Orders" in the totals block on page 1 of the grid order sheet. Or use the regular lines on the short order form to order bulk.

Delivery options

On your order form, please designate how you want to get your seeds. The choices are as follows:

UPS We pull and ship orders as they are received. We process orders according to their arrival date, not their postmark date. Sorry, we do not have a special rush service. If you'd like us to hold your order for a later shipping date, please attach a note to your order form.

UPS Shipping schedule

We begin shipping Fri. Jan. 9.

Orders received by:	We will ship:
Fri. Jan 30	within one week of receipt. (except orders received in December; shipping begins Jan 9)
Sat. Jan. 31-Fri. Feb. 27	within two weeks of receipt.
Sat. Feb. 28-Fri. Mar. 20	within one week of receipt.

Please allow an additional week for mailing and shipping time.

Our aim is to meet or beat our shipping schedule. Early and late orders receive the fastest service, often going out within a few days of receipt. Orders received during peak season in mid-late February go out the slowest. Later orders run a greater risk of out-of-stocks where seed crops come in short or where demand exceeds our estimates.

Many orders, especially early ones, will require one or more additional shipments because not all items will be in stock at the time of the first shipment. We will send invoices with the first shipment. We will make payment adjustments, including refunds for items still missing, in the final shipment. We will send all final shipments by Fri. Mar. 27.

PICKUP Come to our warehouse in Clinton. We'll send a postcard reminder with directions to those planning to come. The warehouse is easy to find, only one mile from I-95 exit 37.

Early pickup Pick up your order Thurs. or Fri. Jan. 29-30 from 9:00am-4:30pm. Sorry, the warehouse is not open for pickups any other days until March. We must have your order in hand by Fri. Jan. 16. We estimate that we will have 85-90% of your order ready at early pickup. You may return for the rest of your order in March, or we can ship it to you.

Regular pickup You may pick up your order Wed-Fri. Mar. 4-6 or Mon.-Fri. Mar. 9-13 from 9:00am-4:30pm. No weekend pickups. We must have your order in hand by Fri. Feb. 13.

Late pickup for orders received after Feb. 13. Pick up during the Moose pickup, Thurs-Fri, Apr. 9-10, 9:00am-4:30, or Sat. Apr. 11, 9 am-12 noon only or at the Fedco Tree Sale, Fri-Sat-Sun, May 1-3, 9:00am-3:00pm. Late orders will not be available for pickup in March.

TRUCK Michael Gulick trucks certain large Vermont and New Hampshire orders during February and March. Contact Michael at (802) 525-3800 by January 15 to arrange this service.

OTHER We will use parcel post only if you specifically request it or if your address is insufficient for UPS to find you. Parcel post is much slower and riskier than UPS.

Repeat Orders

A number of our customers place multiple orders each year. Whatever the reason—members turning in orders to their co-op late, or items being overlooked and not ordered—we treat your second order as a separate order the same as any other order. We do not combine it with an earlier order.

You must add handling charge of $3 if the second order is under $50, regardless of the size of your original purchase.

Repeat orders over $50 continue to qualify for the same volume discount as the first order, regardless of later ordering date, provided they are to be sent to the same address.

Baa! (ckorders)

We know that you desire your seeds shipped promptly, preferably all at once with no backorders at all. Our goal is to reduce backorders to a minimum. We hope we will have many fewer backorders in 1998 than in 1997. Unfortunately, most backorders are outside our direct control, avoidable only if our suppliers make timely deliveries. Our products are alive, subject to the vagaries of weather. Many varieties have only one supplier. Because seeds must move quickly through harvesting, conditioning, testing, shipping to us, repackaging and pulling to get to you on time, we will never be able to completely eliminate backorders. The earlier we ship your order, the more likely one or more items will arrive too late to make the initial shipment. Most UPS orders can expect to receive one or more backorder shipments.

We ship backordered items that need an indoor start as soon as possible after arrival. We hold other backorder items until we have a sufficient quantity to ship to a whole cycle of orders. Compared to customized service of one packet at a time, we save time and money, reduce the number of shipments and cut our turnaround time on first shipments for all orders. Please be patient; your direct-seeded backorder items will probably arrive several weeks or more after your first shipment.

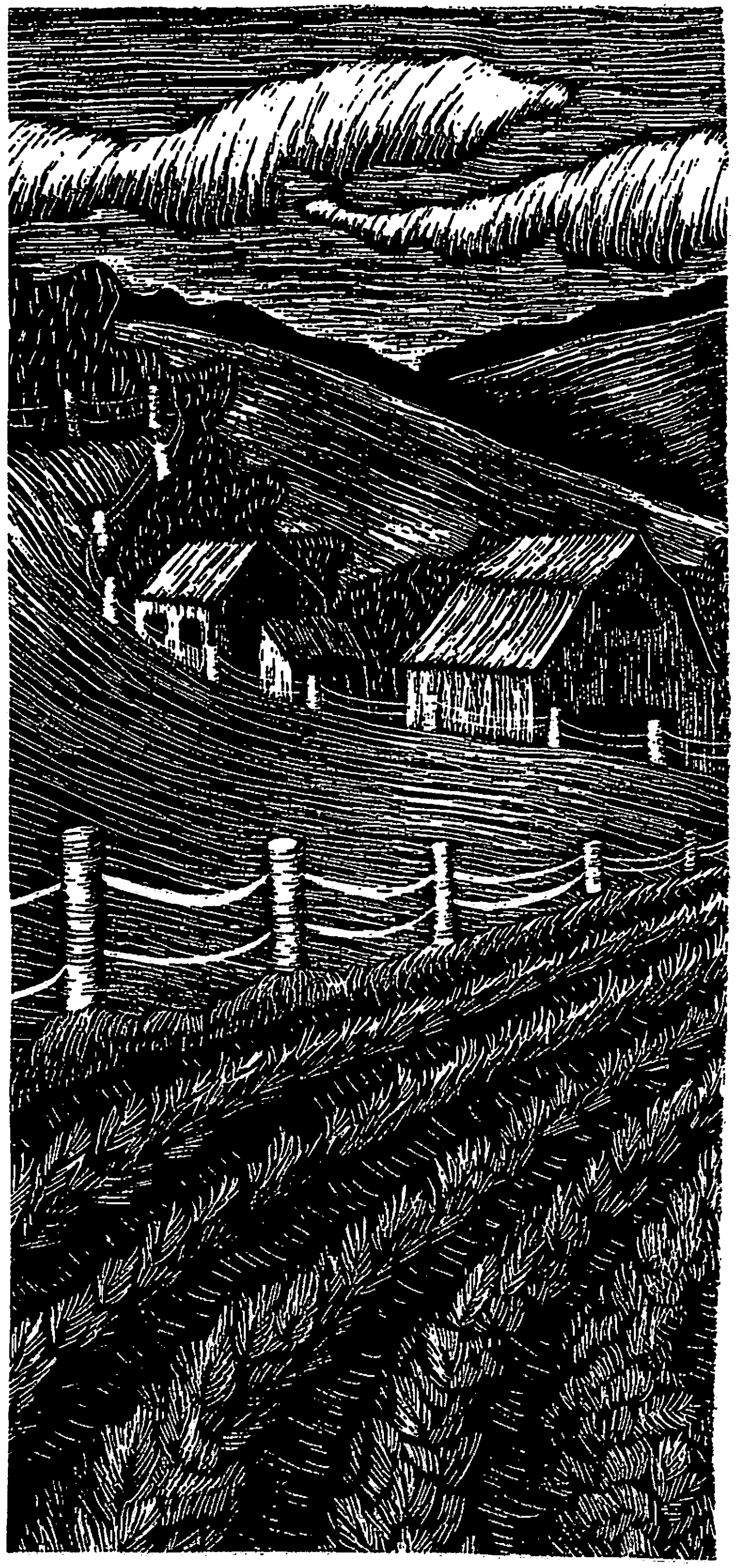
We promise to ship all backorders by Fri. Mar. 27. If you are still missing anything by Apr. 6 and have not received a refund, please get in touch with us ASAP.

Organic Seed?

Some folks mistakenly believe that we sell only organic seed. In fact, only a few of our seed crops are organically grown, and these are clearly noted in the catalog. Commercial quantities of organic seed are still difficult to find. Send us a SASE for a list of some other retail sources of organic seed.

However, **all** of our seeds are **untreated.**

Because we expect the National Organic Standards to take effect in 1999, we are listing as 'organic' only those seed crops which have been certified by an authorized agency. Some of our seed growers, although following accepted organic practices, have chosen for a variety of philosophic or economic reasons not to apply for certification. We have identified in the catalog where uncertified crops have been grown without herbicides, pesticides and chemical fertilizers.



Our Own Seed Crops

We devote many hundreds of hours annually to research. In Nikos Kavanya's extensive variety trials program, skilled staffers and customers evaluate hundreds of cultivars at multiple sites.

Several years ago we began cooperating with Maine seedspeople interested in growing commercial seed crops of varieties specially adapted to this climate, focusing on traditional regional favorites such as dried beans, and heirloom varieties not available from commercial channels. This program first bore fruit in 1991 when we successfully grew seed for 19 varieties. We have extended it to other states and abroad and now offer a diverse selection of melons, squash, gourds, lettuce, peppers and medicinal herbs as well as beans and tomatoes rarely found in other seed catalogs. Each summer in our trials we are continuing to identify outstanding heirloom varieties, selecting the best for seed multiplication, and making plans to introduce them in future catalogs. We will continue to do our part to ensure that the best heirlooms are reintroduced into commerce.

Nevertheless, like most other retail seed companies, we grow only a small percentage of the seed that we sell. Because our Maine climate is not ideal for raising commercial quantities of seed for most varieties, we often purchase quality seed grown in optimum climatic conditions by expert seedspeople in Idaho, Washington, Oregon, California and other western states, or imported from Japan, France, Holland, Denmark, Germany, Switzerland or Italy. In particular, many hybrid varieties come from a few dozen large wholesalers with sophisticated breeding programs and unrivalled expertise in their specialties. Whatever their geographic origin, all of our offerings have been tested in our trials program for high performance in our cold New England climate.

Fedco Will Not Offer Transgenic Cultivars

At our 1996 Annual Meeting we voted unanimously not to knowingly offer for sale any transgenic variety because we think that the benefits of propagating such genetically engineered cultivars do not warrant the risks they pose to the environment. For more information send a SASE to receive Parts I and II of our article entitled "Do You Know Where Your Seed Comes From?" which appeared respectively in our 1995 and 1996 seed catalogs.

$Fedco Supports Sustainable Agriculture$

At our 1997 Annual Meeting, the staff voted to re-endow our Educational Subsidy Fund, and to allocate $3,300 to it over the next year. This money will be donated to individuals and groups working on projects to further goals of cooperation, to preserve and extend our genetic diversity, and to educate consumers, gardeners and farmers about the benefits of sustainable agriculture. In the past we have funded workshops on seed-saving and Community Supported Agriculture, supported seed-saving exchanges, and recently co-sponsored the November, 1997, Penn State conference on Preserving Crop Biodiversity in the Northeast.

Help MOFGA'S Common Ground Fair Permanent Site Campaign!

1997 was our sixteenth consecutive year exhibiting at Common Ground Fair, a magical gathering where we visit with many hundreds of people, renew countless friendships, and sell thousands of bulbs and seed packets. Over the years, from our founding right up to the present, our fortunes and MOFGA's have been inextricably linked. After years of searching, Maine Organic Farmers and Gardeners Association has bought the site of its dreams—200 acres in Unity and Thorndike. Fedco has pledged $20,000 towards the $2.6 million needed to turn the parcel into a year-round home for the Fair and many other special events. You can help us meet that commitment. On the bottom of the totals page of your order form we have left a line for making an optional donation to MOFGA's Permanent Site Campaign. For an even more painless way to contribute, direct us to donate all or part of your refund to the campaign on the designated line on the totals page. If all goes well, the Fair will move to Unity in 1998! We'll be there.

HONORING PLANT BREEDERS

Although Fedco catalogs bring together a collection of hundreds of plants that nourish our bodies and our spirits, we are only evaluators, popularizers and marketers. Plant breeders are the real creative geniuses.

Let us honor those who work with nature to help create the varieties we love: Quirky yet dedicated, intuitive yet patient, visionary yet practical, at once able to focus on the minutiae of plant growth while keeping sight of broad project objectives...without the Elywn Meaders, the James Baggetts, the Henry Mungers, the Calvin Lamborns, the Alan Kapulars, the Frank Mortons, and the Tim Peters, our world would truly be impoverished.

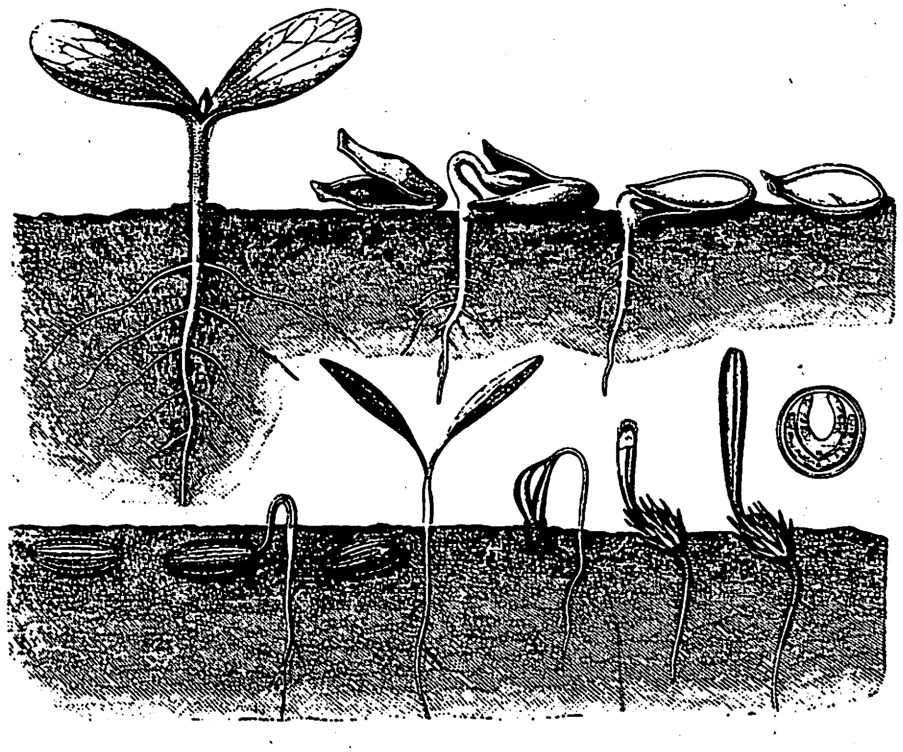
Earlier this century, fecund university research and plant breeding programs released thousands of improved cultivars to the public domain. Dedicated researchers freely traded ideas and germplasm around the world, cross-pollinating matter and spirit into new forms of life.

As the seed industry consolidates into fewer and fewer agribiz mega-units, interest in classical plant breeding gives way to emphasis on genetic engineering. As new varietal development becomes more and more privatized, cooperation and collegialty dissolve into competition and secrecy. The relationship between our universities and the seed industry alters. Profiteering on both sides brings complex licensing and patenting arrangements. The public is the loser.

As we reflect on our present predicament, let's look backwards and forwards to profile a few of the great plant breeders of this century. Some, like Henry Munger, James Baggett and Elwyn Meader, came out of still vital university programs; others, born perhaps too late for the halcyon days at the universities, have chosen different paths to arrive at their life calling. (See pages 13, 16, 28, 29, 34, 43.)

We hope these vignettes will stimulate you who plant seeds every year to reflect upon origins, and to inspire those few of you who might have the gift to follow the path of a Luther Burbank, Elwyn Meader or Frank Morton.

> Time is the nurse and breeder of all good.
> *The Two Gentlemen of Verona* III, i, 244



The trend of seed company mergers continued unabated last year. Following the union of Ceiba-Geigy Ltd. and Sandoz Ltd. in December, Rogers Bros., Northrup King, Hilleshog and S&G became member companies of Novartis Seeds. In July, Ferry-Morse Seed Co. was absorbed by Harris-Moran Seed Company. Petoseed bought out New York sweet corn and cucurbit grower Robson. Some observers believe that by 2000, a mere half dozen multinationals will control most of the market.

RESOURCES

The Seed Savers Exchange, 3076 N Winn Rd, Decorah, IA 52101, is a grassroots network of gardeners and plant collectors who maintain and distribute rare varieties of food crops. Their 1997 Yearbook listed 1004 members who maintain a combined collection of almost 12,000 heirloom vegetable varieties. Over the past six years the SSE has purchased the 170-acre Heritage Farm where they house their own collection of 15,000 varieties including 3,800 tomatoes, 3,350 beans, 1,150 peppers, 900 peas and more. Annual membership is $25, or send $1 for informational brochure. **The Flower and Herb Exchange**, whose members maintain over 1000 varieties of heirloom herbs and flowers, is at the same address. Annual membership in FHE is $7.

The Scatterseed Project, Box 1167, Farmington, ME 04938, is a regional seed exchange for this area and curator for a substantial part of the SSE collection. They do not have a catalog; all varieties are available through SSE. Scatterseed maintains around 850 varieties of peas and 650 of potatoes among its over 5,000 plant varieties.

The Maine Seed Saving Network, PO Box 126, Penobscot, ME 04476, promotes and preserves the genetic diversity found in open-pollinated varieties and helps maintain public access to these varieties through active production and distribution of seeds and information about saving seeds. Annual membership is $8 for individuals, $12 for families.

Butterbrooke Farm Seed Co-op, c/o Thomas Butterworth, 78 Barry Rd. Oxford, CT 06478-1598 is a seed savers cooperative in Connecticut which publishes a newsletter and has a seed exchange. Annual membership is $12.50.

Garden State Heirloom Seed Society, c/o Joe Cavanaugh, PO Box 15, Delaware, NJ 07833 is a seed savers organization in New Jersey with a seed exchange. A couple of the members have marvelous tomato collections. Annual membership is $7.

MOFGA (Maine Organic Farmers and Gardeners Association), PO Box 2176, Augusta, ME 04338, or call (207) 622-3118, works to promote sustainable agriculture through legislative and educational initiatives, annual sponsorship of the Common Ground Country Fair, publication of its quarterly newspaper, and sponsorship of a farm apprenticeship program and a community gardening program. Maintains local chapters.

NOFA (Northeast Organic Farming Association) is for the rest of the Northeast what MOFGA is for Maine. Maintains state chapters in VT, NH, MA, RI, CT, NY and NJ (also serves PA). Sponsors educational conferences each summer and winter, and publishes a quarterly newspaper. Of particular interest were special supplements on seeds in their Winter 1995-1996 issue and on tomatoes in their Fall 1996 issue. For more information, write Julie Rawson and Jack Kittredge, 411 Sheldon Rd, Barre, MA 01005 or call (508) 355-2853.

The Bio-Dynamic Farming & Gardening Association, PO Box 550, Kimberton, PA 19442, Sponsors annual conference on topics of interest to biodynamic growers, maintains a nationwide CSA directory (call 1-800-516-7797), annually publishes the Stella Natura Calendar (See #6690 in our books section).

Small Farmer's Journal, 325 Barclay Way, Sisters, OR 97759. Published quarterly, $7.00 per copy, $24.00 for a year's subscription. The antithesis of those slick, superficial gardening magazines, this meaty publication is aimed at serious horse farmers but will appeal to anyone seeking iconoclastic political observations, in-depth treatments of rural economics, liking to tinker with machines (has the best equipment drawings of any publication I've seen) or appreciating fine craftsmanship.

Growing for Market, PO Box 3747, Lawrence, KS 66046. Published monthly, year's subscription is $27. Here's where we turn for practical information about organic food and flower production for market, good coverage of CSA and other timely topics.

Fedco Seeds 1994 catalog contained a resource directory of other retail seed catalogs we have found useful. Please send us a SASE for this listing.

Annual membership rates for MOFGA and NOFA. You can join when you order; list names and addresses on a separate sheet, indicate new membership or renewal, add total on order form.

state	individual	family	supporting	other	
ME	25	35	60	15	student/elder
VT	25	35	75		
NH	25	35	100		
MA	25	35	100	15	low income
RI	20	30	50		
CT	35	35	100	20	low income
NY	25	30	100	15	student/senior
NJ	25	35	50	15	low income

Variety Descriptions by CR Lawn - As indicated in the descriptions, some of our selections are more suitable for home gardeners than commercial growers. Farming/gardening is more an art than a science, with many factors, especially your microclimate, soil type and cultural practices, having a significant impact on performance. Success in our trials is not a guarantee of success in your plot. We advise market growers to trial unfamiliar varieties on a small scale before making a full commitment.

As a guide to growers we've included information about disease tolerance/resistance provided by our suppliers. We are not plant pathologists and cannot guarantee that tolerant or resistant cultivars will never be harmed. Actual performance in the field depends on climate, weather and cultural practices which we cannot control. In particular, the absence of information on the older varieties does not mean they will keel over at the first sign of stress. While conscious breeding for disease tolerance/resistance began relatively recently, cultivars which have stayed around for generations have proven adaptable to a variety of conditions. Following is the key of abbreviations which will appear after the variety descriptions. A number after the abbreviation indicates which race of pathogen.

ALS	Angular Leaf Spot	N	Nematodes
ALTS	Alternaria Leaf Spot	NCLB	Northern Corn Leaf Blight
ASC	Alternaria Stem Canker	NY 15	NY 15 Mosaic Virus
ANTH	Anthracnose	PEMV	Pea Enation Mosaic Virus
BR	Black Rot	PLR	Pea Leaf Roll
BSR	Bacterial Soft Rot	PS	Peronospora
BS	Bacterial Speck	PY	Potato Y virus
CBMV	Common Bean Mosaic Virus	PM	Powdery Mildew
CLS	Cercospora Leaf Spot	S	Semphylium
CMV	Cucumber Mosaic Virus	SEPT	Septoria Leaf Spot
CTV	Curly Top Virus	ST	Stewart's Wilt
DM	Downy Mildew	TEV	Tobacco Etch Virus
F	Fusarium	TMV	Tobacco Mosaic Virus
GSB	Gummy Stem Blight	V	Verticillium
LCV	Leaf Curl Virus	W	Common Wilt race 1
LMV	Lettuce Mosaic Virus	YBM	Yellow Bean Mosaic

The initials PVP after a variety indicate that the variety is patent protected. Unauthorized propagation of the seed is prohibited. The use of PVP in the catalog is for informational purposes only and in no way constitutes an endorsement by Fedco of plant patenting.

AAS=All-America Selection.

Prices - By popular demand, we now include sizes and prices in the catalog. For vegetable seed they are at the end of each variety description.

Seed Counts - Seeds per size A packet for vegetables are approximate. They are intended as guides not guarantees. Information under specific varieties is based on actual counts from 1996 or 1997 packets. Seed size and count often vary from one year's crop to the next; expect past counts to provide only a rough approximation for 1998.

As I had made my meal, and parted with prayers for the provider.
Cymbeline III, vi, 51

BEANS *Phaseolus vulgaris*

2 oz. packet sows 25 ft; 1 lb., 200 ft. Tender, will not survive frost. Plant 3-4 seeds/ft. in rows 24-30" apart. Pick frequently to keep beans producing, but stay out of the patch in wet weather to prevent spread of fungal diseases. Many bean crops in 1997 were devastated by potato leafhoppers. Leaves curled, yellowed, turned brown, and plant growth was stunted. Leafhoppers have always been present, but they were blown into our area from the Gulf States in record numbers by heavy spring winds. They cannot winter over in our climate. Whether they will return in 1998 is anyone's guess, but history is on our side. 1997 was only the third serious infestation in the 20th century. Organic control is difficult; even users of the strong poison pyrenone had uneven success. Our bush beans, covered with reemay till blossoming, escaped the devastation and produced a bountiful harvest. Our pole beans, without the benefit of covering, were almost a complete bust. This year we are listing seed color: White-seeded beans usually don't germinate as well as dark-seeded. See also #6804.

BUSH GREEN BEANS

204 Provider (50 days) Tied with Contender for earliest producer among the 25 varieties in our 1997 trial. For highest early yields, even under adverse conditions, and rich beany taste, old reliable Provider can't be beat. Noted for its concentrated sets of round 5-5^1/2" pods. Our best-selling bean for nineteen consecutive years. Released by USDA in 1965. Purple seed. Resistant to CBMV, NY 15, PM, DM. A=2oz, 80¢, ~180 seeds, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.50; 25lb, $50.00; 50lb, $90.00.

214 Greencrop (53 days) An early flat-podded Romano type especially adapted to the North. Pods can grow up to 8" long while still retaining good quality. 1957 AAS. White seed. Tolerant to CBMV. A=2oz, 80¢, ~115 seeds, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.50; 25lb, $50.00; 50lb, $90.00.

224 Royal Burgundy (55 days) Less foliage than Royalty Purple Pod, which it replaced. Straight 5" meaty purple pods turn bright green after two minutes of blanching. Grows well even in cold conditions. Light brown seed. Resistant to CBMV, NY 15, PM. A=2oz, 80¢, ~175 seeds, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.50; 25lb, $50.00; 50lb, $90.00.

230 Jade (56 days) PVP. Introduced in 1996, became an instant best-seller. Nearly toppled Provider as our most popular bean in 1997. We've ordered 1,350 pounds for 1998, but don't be surprised if we run out again in March. A favorite with both market and home gardeners, Jade offers great yields of tasty, 5-7" straight slender round dark green pods. Holding quality is Jade's byword. Not only do the pods hold their rich color longer than others, both on the vine and after picking, but also Jade retains the ability to keep producing those quality pods until late in the season, long after others have quit. Jade's strong upright bush habit holds pods above the ground, reducing curling and tip rot. Pods are tender, yet maintain that traditional bean flavor. White seed. Resistant to CBMV, NY 15, CTV, tolerant to rust. A=2oz, 80¢, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $15.00, E=10lb, $27.50; 25lb, $62.50; 50lb, $115.00.

238 Bush Blue Lake 274 (57 days) Long considered to set the taste standard for home garden bush bean varieties. Pods avg. 6", fill slowly with tender, plump beans. Very high yields of yummy green beans. White seed. Resistant to CBMV, NY 15. A=2oz, 80¢, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.50; 25lb, $50.00; 50lb, $90.00.

246 Roma II (59 days) Answers numerous customer requests for a true flat bush Romano bean. A heavy yielder of fleshy medium-green 5" pods which are slow to develop seeds. White seed. Resistant to CBMV, NY15. A=2oz, 80¢, ~200 seeds, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $15.00, E=10lb, $27.50; 25lb, $62.50; 50lb, $115.00.

BUSH WAX BEANS

262 Golden Rocky (54 days) Also known as Beurre de Rocquencourt, an heirloom from France. The best-tasting wax bean. Germinates well in cool, wet conditions and retains vigor even under cool night temperatures. Noteworthy for slender juicy pods that melt in your mouth. Not beany. Pods grow to 6". Black seed. A=2oz, 80¢, ~245 seeds, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.50; 25lb, $50.00; 50lb, $90.00.

271 Buttercrisp (57 days) We don't switch bean varieties often, but we found Buttercrisp to be sweeter and more tender than Golden Butterwax, which it replaces. Its 5^1/2" rounded slender bright yellow pods fatten slowly. Market growers will like its good yields and clean, attractive appearance. Home gardeners will enjoy its distinctive flavor. Resistant to CTV, rust and CBMV. NEW! A=2oz, 80¢, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.50; 25lb, $50.00; 50lb, $90.00.

277 Dragon Langerie (57 days) Also known as Dragon's Tongue, this heirloom from the Netherlands is as tasty as it is attractive. Its compact stocky bushes bear abundant creamy yellow beans mottled with purple tiger stripes. A prolific producer of flat 6" pods that are crisp, stringless and amazingly juicy. Dragon is way too good to be dismissed as a novelty. Seed purplish brown with blue stripes. A=2oz, 80¢, ~120 seeds, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.50; 25lb, $50.00; 50lb, $90.00.

POLE BEANS

2 oz. packet sows 20 poles, 6 per pole. We've used tipis for staking for years. Will Bonsall suggests letting them climb sunflower stalks (give the sunflowers a 2-week head-start). See also #406-415.

286 Kentucky Wonder (68 days) Also known as Old Homestead. This standard climbing variety, a favorite since the mid 1800s, was given its present name by the eminent seedsmen James J.H. Gregory & Sons in 1877. Offered by Olds Seed Co. in their 1915 catalog for 10¢ a packet and 20¢ a pound. The nutty flavor makes them outstanding for freezing. Pick regularly to maintain quality & production. Not good when fat. Brown seeds. A=2oz, 80¢, ~125 seeds, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.50; 25lb, $50.00; 50lb, $90.00.

292 Rattlesnake (70 days) Rescued from our discontinued section by customer comments like these: "My 15-year old son said 'What kind of beans are these? They're the best beans I've ever tasted.' We all agree. Fresh or frozen." and "Please bring back Rattlesnake. They're so tender and sweet they could break your heart! And beautiful!" 'Nuff said. This heirloom, called the "Preacher Bean" in parts of the South, produces a good harvest of round 6-7" pods. Purple streakings on the pods are said to resemble the markings of a rattlesnake. Tan seed with dark stripes. A=2oz, 80¢, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.50; 25lb, $55.00; 50lb, $100.00.

MISCELLANEOUS BEANS

298 Windsor Fava (75 days) *Vicia faba* Bush type. Favas are also known as broad beans. Heirloom listed by Fearing Burr in Field and Vegetable Gardens of America in 1863. Unlike other beans, favas should be planted as soon as the ground can be worked. They tolerate frost, but do not thrive in hot weather. Sow the large seeds 3-4" apart. Harvest when the light green beans in the 6" glossy pods reach the green shell stage. Parboil one minute, drain and cool, slip from skins, and cook about 5-10 minutes more. Brown seed. A=2oz, 80¢, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.50; 25lb, $50.00; 50lb, $90.00.

310 Taylor Dwarf Horticultural Shell (68 days) Also known as Speckled Bays, this heirloom shell bean predates 1800. Early producers of cream-colored pods splashed with carmine red. Shell right after picking, boil until tender (30-45 minutes) and mix with olive oil, chopped garlic and parsley for a late summer treat. Buff seed with red stripes. A=2oz, 80¢, ~120 seeds, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.50; 25lb, $50.00; 50lb, $90.00.

318 Scarlet Runner (70 days) Climbing beans often grown as ornamentals for their brilliant scarlet blossoms which attract hummingbirds. Need trellises, fences, or poles; will grow to 10-12'. Can be eaten both as snap or shell (95 days) beans. Beautifully mottled purple and black seeds. Heirloom variety grown as early as 1750 by colonists and in 1791 by Thomas Jefferson. A=2oz, 80¢, ~46 seeds, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $15.00, E=10lb, $27.50; 25lb, $62.50; 50lb, $120.00.

DRY BEANS

All bush types except where noted.

328 Limelight (85 days) Years ago we trialed Limelight for bush green beans (45 days) and they were horrible, stringy and tough. Had we allowed them to get to the shell stage (around 60 days) or to dry, we'd have liked them much better. The compact plants set light green seeds which are similar in shape, color and taste to baby limas, except sweeter, with a buttery texture. They are very early for a dry bean, making them much easier to grow than limas in our climate. Developed in Alberta, Canada. Light green to white seeds. A=2oz, 80¢, ~102 seeds, B=^{1}/2lb, $2.50, C=1lb, $4.50, D=5lb, $20.00, E=10lb, $37.50.

334 Marfax (86 days) Heirloom resembling Swedish Brown Bean, but earlier and higher yielding. Richly flavored brown baking bean very adaptable to our cool climate. Seed produced in Maine. Golden tan seed. A=2oz, 80¢, ~148 seeds, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.50; 25lb, $52.50; 50lb, $100.00.

342 Jacob's Cattle (88 days) Popular New England heirloom variety which derives its name from the biblical story of Jacob and the spotted cattle. Its dark red speckles on white background are said to look like the cattle's markings. If harvested earlier the kidney-shaped beans make superb shellies. Seed produced in Maine. A=2oz, 80¢, ~95 seeds, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.50; 25lb, $52.50; 50lb, $100.00.

350 Soldier (89 days) Large drought-tolerant white kidney bean with red-brown soldier-like figure on its eye. A New England favorite for generations. Seed grown in Maine. A=2oz, 80¢, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.50; 25lb, $52.50; 50lb, $100.00.

358 Monos Negros (90 days) The name means "black monkeys" in Spanish. Trialer Marina Davis brought this small heirloom black bean to our attention. Plant economy and extreme earliness are its primary assets. Plants neither sprawl, twine nor get moldy. Flavor is not quite as rich as Black Turtle, but Monos ripens much earlier. Seed originally collected by Will Bonsall from Salvadoran immigrants in Vassalboro, ME. Seed organically grown by Alison LaCourse. A=2oz, 80¢, ~194 seeds, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $15.00, E=10lb, $27.50; 25lb, $55.00; 50lb, $100.00.

368 Maine Yellow Eye (92 days) A very old variety, with many different strains. One of Maine's most popular dried beans. Plump oval medium-sized beans, cream with yellow eye. Seed grown in Maine. A=2oz, 80¢, ~115 seeds, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.50; 25lb, $52.50, 50 lb, $100.00.

376 Red Kidney (102 days) Early maturing variety of light red kidney baking bean developed at Cornell University. Large beans mature at least a week earlier than similar types. Seed grown in Maine. A=2oz, 80¢, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.50; 25lb, $52.50; 50lb, $100.00.

384 Black Turtle (104 days) The variety, dating back before 1806, was offered by Thorburn, one of the first US seedsmen, in 1832. This strain is a tall bush developed by Cornell University. Small black beans with rich spicy flavor popular for soup. Seed grown in Maine. A=2oz, 80¢, ~305 seeds, B=^{1}/2lb, $2.10, C=1lb, $3.50, D=5lb, $13.50. *Not available in larger sizes.*

BEAN THERE

POLE BEANS

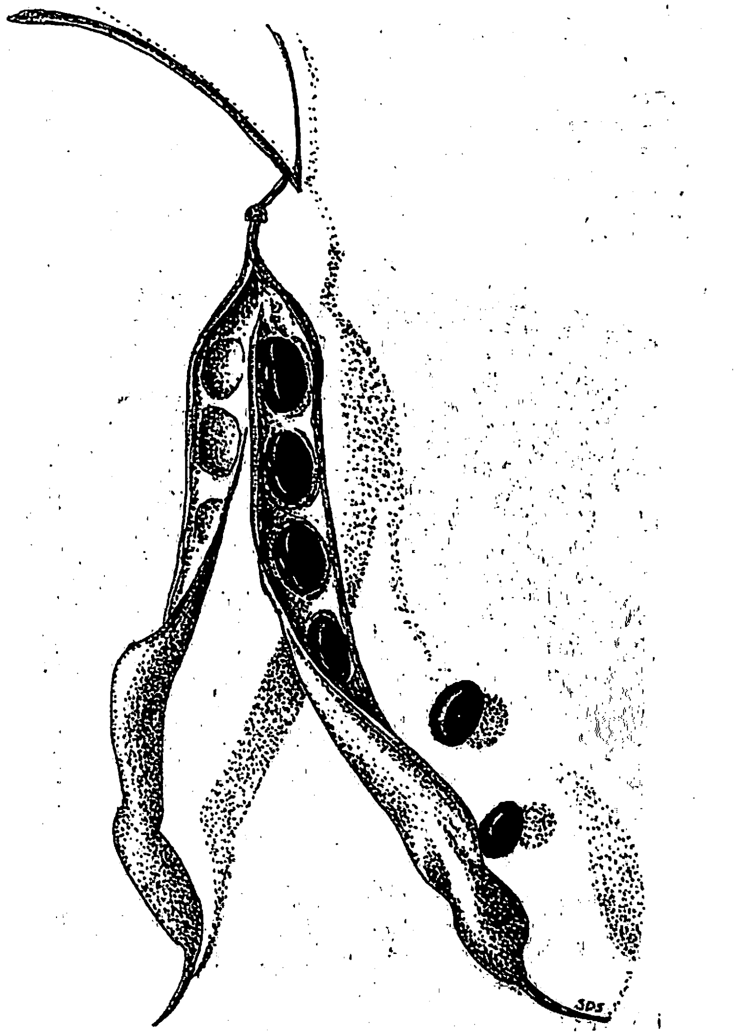
406 Northeaster Pole (55 days) Also known as Kwintus. The seed comes from Holland. Earliest and best-tasting pole bean we've tried. Ripens almost two weeks earlier than Kentucky Wonder. Vigorous climbers with outstanding flavor which improves with blanching. Somewhat flattened pods don't get tough even when big. In recent years we've tried several dozen pole beans and have yet to find one that comes close to matching the quality of Northeaster. Expensive seed worth the extra cost. White seed. A=^{1}/2oz, $1.00, ~28 seeds, B=2oz, $3.00, C=^{1}/2lb, $9.00, D=1lb, $17.50, E=5lb, $80.00.

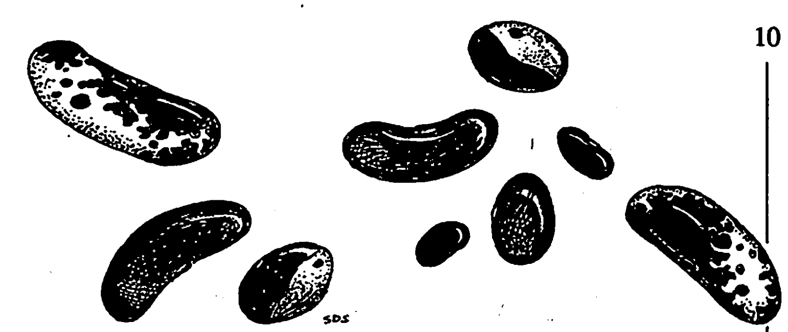
415 Emerite Pole (60 days) A fancy French filet pole bean, Emerite may be picked in the baby stage when the pods are very thin and about 4" long, or allowed to grow a full 7". The elegant straight pods do not develop strings and are slow to fill out. Black seed. A=^{1}/2oz, 60¢, ~38 seeds, B=2oz, $1.60, C=^{1}/2lb, $6.20. *Not available in larger sizes.*

HARICOTS VERTS

Haricot vert is French for green bean. This type has fancier quality than American beans and should command a premium in markets. For optimal flavor, pick pods while they are still thin before they develop strings.

432 Maxibel (61 days) Heavy producer of uniform dark green fancy stringless 6-8" pods of exceptional length and ramrod straightness. Voted best-tasting haricot vert in our 1995 trial. Pick early and often for highest quality, tenderness and succulent flavor. A gourmet market specialty. Set a Fedco sales record for *haricots verts* as a new item last year. Black seed. A=^{1}/2oz, 60¢, B=2oz, $1.60, C=^{1}/2lb, $4.50, D=1lb, $7.50, E=5lb, $32.00.





SOUP, SHELL & DRY BEANS

444 Vermont Cranberry (70 days) This is the same strain of the heirloom once offered by Vermont Bean Seed. The pods contain 5 to 6 speckled cranberry-colored shell beans. Reliable, hardy and easy to shell. A New England tradition since before 1800. For dry beans, add three weeks to maturity date. Seed grown in Maine. *Caution: viney habit has not been bred out of this cultivar.* A=½oz, 60¢, ~32 seeds, B=2oz, $1.60, C=½lb, $3.50, D=1lb, $6.00, E=5lb, $20.00, 10lb, $30.00.

448 Cannellini (80 days) Also known as Cannelone, predates 1900. ½" white kidney shell bean. The clear winner of the four varieties in our staff taste test, drawing such comments as "really scrumptious—where's the tortillas?" "creamy delicious," and "my favorite." The mild-tasting beans become tender when cooked, perfect for minestrone and other soups or stews. May also be grown as dried beans; add 20 days to maturity. Good performer in cool weather. NEW! A=½oz, 60¢, B=2oz, $1.60, C=½lb, $4.50, D=1lb, $7.50, E=5lb, $20.00, 10lb, $37.50.

452 King of the Early (85 days) Some years back longtime seed-saving customer Linwood Ware sent us a sample of this beautiful mottled red baking bean. King's ability to ripen early, its capacity to swell enormously when soaked, its utter dependability through hot summers and cool, and its hearty flavor make it a real winner. We've found King of the Early easy to grow and heavy yielding year after year. Seed grown in Maine. A=½oz, 60¢, ~25 seeds, B=2oz, $1.60, C=½lb, $4.50, D=1lb, $7.50, E=5lb, $20.00, 10lb, $30.00

462 Hutterite (88 days) These greenish-tan plump beans with a charcoal ring around the hilum turn into delicious creamy chowder in a little under an hour of cooking. 2-3' bushes are good yielders. The Hutterites, a communal Anabaptist sect, brought this heirloom soup bean with them when they crossed the Atlantic from Austria in the 1750s. Seed organically grown in Maine. A=½oz, 60¢, B=2oz, $1.60, C=½lb, $4.50, D=1lb, $7.50, E=5lb, $20.00, 10lb, $30.00.

470 Calypso (90 days) In 1994 Calypso generated more interest than any other bean introduction in years. And no wonder. Our first glimpse of Calypso at the 1992 Common Ground Fair Exhibition Hall won us over. At once stark and stunning, its markings are uncannily similar to the Chinese yin/yang symbol. This black and white dry bean even includes a contrasting dot. Though not as heavy a yielder as King of the Early, Calypso dependably produces 4-5 beans per pod, with a texture similar to Yellow Eye. For good recipes see Calypso Bean Soup by Lesa Heebner (#6514 in the book section). Seed grown in Maine. A=½oz, 60¢, ~28 seeds, B=2oz, $1.60, C=½lb, $4.50, D=1lb, $7.50, E=5lb, $20.00, 10lb, $30.00.

476 Agate Pinto (92 days) A bush pinto with medium-sized mottled beans of rich spicy flavor. Rogers Bros. succeeded in breeding out the usual sprawling runners, a breakthrough in Pinto development which makes Agate easy to harvest. Seed grown organically in Maine by staffer Alison LaCourse. A=½oz, 60¢, ~33 seeds, B=2oz, $1.60, C=½lb, $3.50, D=1lb, $6.00, E=5lb, $20.00, 10lb, $30.00.

478 Bumblebee (95 days) Big fat blocky bean, white with a maroon "bee" with stinger around hilum. Really swells up when soaked, almost like a lima. May be served as shell beans (subtract 20 days from maturity date), add butter or olive oil, salt and pepper. Allowed to dry, make an excellent easy-to-digest baking bean, cooking up with a nice smooth texture and flavor. Limited supply of organic Maine-grown seed. NEW! A=½oz, 60¢, *not available in larger sizes.*

479 Red Chili (100 days) May be same variety as Mexican Red. Mahogany red bean black around the eye, oval but flat, looks like a kidney but smaller. Its earthy taste makes an ideal base for chili. Grainy texture makes it unsuitable for baking. Easy to digest. The vining plants yield very well. Gene found the original seeds in a health food store, liked the beans so much he saved the seeds for a growout. Seed organically grown in Maine. NEW! A=½oz, 60¢, B=2oz, $1.60, C=½lb, $4.50, D=1lb, $7.50, E=5lb, $20.00.

MISCELLANEOUS BEANS

488 Tohya Soybean (88 days) *Glycine max* Our long search for Fedco's answer to Butterbeans reached fruition in this Japanese variety. Tohya has proven to be an early reliable heavy producer in trials every year, wet or dry. Vigorous vines grow thigh-high with early concentrated sets of easy-to-pick delicious light green pods, many with three beans. These are a good substitute for limas in short-season areas. The Japanese eat them as beer nuts, boiled and salted. A wonderful fresh soyfood. Order early for Maine-grown seed. Later orders will be filled with imported seed. A=½oz, 60¢. *Not available in larger sizes.*

AMAIZING CORN *Zea mays*

2 oz packet sows 50 ft, 1 pound sows 400 ft. CAUTION: Untreated sweet corn seed will not germinate in cold wet soil. Please be patient and wait till soil warms to at least 60° before sowing, or start seedlings indoors and transplant at 3-6" stage before taproots take off. Tender, will not survive frost. Heavy nitrogen requirements. Rows 3' apart, 4 seeds/ft. Thin to 1' apart. When corn is knee-high, a side-dressing of azomite or alfalfa meal can really stimulate growth. Should be planted in blocks of at least 4 rows to ensure adequate pollination, essential for good tip fill.

If you have trouble with crows pulling up seedlings, use Bird-Scaring Balloons (see **#9351**) or cover sowings with floating row covers (**#9121-9133**). Remove covers at 3-6" stage to avoid plant abrasion. A few drops of mineral oil applied to the silks can substantially reduce earworm damage. Although we know of no sure defense against critters, interplanting with pumpkins may improve the odds.

In the past four years we've added a dozen new corns to our list, nine of which are homozygous sugary enhanced crosses (five from the superb breeding program at Mesa Maize). Our trialers Donna Dyrek (Loon Song Farm) and I (Shooting Star Farm) have found sugary enhanced corn to be especially suitable to our climate, with good cool-soil tolerance and a near-perfect blend of sugars and corn flavor. All SE sweet corn traces back to a single inbred developed in the 1960s in Illinois by Dr. Dusty Rhodes, ILL677a.

If you like your corn supersweet, check out our 2 new sh$_2$ selections. Be sure to isolate your supersweet corns by at least 25' (100' for large plantings) to avoid tough, starchy kernels.

See also **#6808-6812.**

YELLOW SWEET CORN

508 Spring Treat (71 days) The choice of early corn connoisseurs, Spring Treat has been our most popular sweet corn since its introduction in 1995. We've tasted a lot of new earlies in recent years, but none have zinged our taste buds like this yellow SE hybrid. Showing good cold soil emergence, Spring Treat ripens around the time of Sugar Buns, but with longer ears that are easier to pick. The real clincher is its rich corny taste that we hadn't enjoyed since Intrepid. Not as sweet as Sugar Buns, but better eating quality, ear length and appearance than any other early corn. A=2oz, $1.25, ~280 seeds, B=½lb, $4.00, C=1lb, $6.80, D=5lb, $30.00, E=10lb, $60.00.

516 Ashworth (72 days) Ashworth is a composite of early varieties originally developed by the late Fred Ashworth of St. Lawrence Nurseries and marketed by Johnny's Selected Seeds starting in 1978. According to a local legend, Ashworth originally named his variety "Rat Selected" in honor of the rats who broke into his seed storage room and alerted Ashworth, who respected rat sense, to certain kernels which they preferred. Ashworth corn is open-pollinated so you can save your own seed. Its short stalks have 6-7" yellow ears with good flavor. Be sure to harvest it at peak milk stage—like all open-pollinated corn it does not hold quality for long in the field. Germinates well in cool soil. A=2oz, $1.25, ~210 seeds, B=½lb, $4.00, C=1lb, $8.00, D=5lb, $39.00. *Not available in larger sizes.*

524 Sugar Buns (74 days) Yellow sugary enhanced hybrid from Crookham with melt-in-your-mouth tenderness. About as sweet as our palates like, but not cloying like the supersweets. Sugar Buns does not have as good cold soil emergence as other early corns; please don't rush it. A=2oz, $1.25, ~405 seeds, B=½lb, $4.00, C=1lb, $6.80, D=5lb, $30.00, E=10lb, $60.00.

540 Bodacious (77 day) Crookham's sugary enhanced hybrid has exceptionally sweet corny tender yellow kernels that taste as good as its name! 8" ears have been outstanding in our trials. Resistant to ST. A=2oz, $1.25, ~270 seeds, B=½lb, $4.00, C=1lb, $6.80, D=5lb, $30.00, E=10lb, $55.00.

546 Kandy Plus (78 days) Kandy Plus grows the most attractive ears of corn we've ever seen. Only Silver Queen can come close to matching its perfect appearance. Its 8½" cylindrical ears usually fill all the way to the tips. It doesn't disappoint on flavor, either. The "Kandy" in its name says all you need to know about its sweetness. The "Plus" is the corny quality it delivers on top of its sweetness. For a classic midseason yellow homozygous sugary enhanced treat, grow hybrid Kandy Plus. Resistant to common rust. Tolerant to ST and NCLB. Replaces Kandy King. NEW! A=2oz, $1.25, B=½lb, $4.00, C=1lb, $8.00, D=5lb, $36.00, E=10lb, $70.00.

556 Tuxedo (80 days) Dress may be an over-rated quality in human society, but when it comes to commercial sweet corn varieties, dress is more than just a pretty face. The well-dressed sweet corn has good husk protection to keep those pesky earworms out! Tuxedo lives up to its name. When other varieties were infested with earworms in 1994, Tuxedo had none, even when we left it on the stalks past peak maturity. Nor are sugary enhanced hybrid Tuxedo's attributes confined to the surface. It offers a rich sweet tender corny taste which is the equal of any midseason yellow, and handsome 8" ears with 16 rows of delicious kernels that will melt in your mouth. Tuxedo can germinate at cool temperatures and withstand a fair amount of stress. I haven't worn one since my high school prom, but I'd want this one for my farmstand! Tolerant to ST, rust and smut. A=2oz, $1.25, ~355 seeds, B=½lb, $4.00, C=1lb, $6.80, D=5lb, $30.00, E=10lb, $55.00.

SWEET CORN SELECTIONS AT A GLANCE

variety	item #	days	color	type*	avg height	ear length	# rows
Seneca Horizon	6808	71	yellow	ns	64"	8"	16-18
Spring Treat	508	71	yellow	se-se	72"	7-8"	14
Ashworth	516	72	yellow	op	60"	6-7"	12
Sugar Buns	524	74	yellow	se-se	76"	6-7"	14
Bodacious	540	77	yellow	se-se	87"	8"	18
Kandy Plus	546	78	yellow	se-se	84"	8.5"	16-20
Kandy King	6810	79	yellow	se-se	90"	8"	16
Tuxedo	556	80	yellow	se-se	90"	8-9"	16
Supersweet Jubilee	559	85	yellow	sh$_2$	96"	8.5-9"	18
Incredible	560	85	yellow	se-se	90"	8"	18
Kandy Korn	564	89	yellow	se	102"	8"	16
Quickie	578	71	bicolor	ns	52"	7"	12
Seneca Appaloosa	580	73	bicolor	sh$_2$	66"	8"	16
Double Gem	584	76	bicolor	se-se	75"	8"	16-18
Kiss 'n Tell	6812	81	bicolor	se-se	76"	7"	16
Lancelot	602	82	bicolor	se-se	84"	7-8"	16-18
Burgundy Delight	610	84	bicolor	ns	84"	7-8"	12-14
Spring Snow	626	73	white	se-se	66"	7-8"	12-16
Luther Hill	636	82	white	op	48"	5"	
Platinum Lady	646	83	white	se	84"	8.5"	14
Silver Queen	658	96	white	ns	102"	8"	14-16

*genetic type
op = open-pollinated
ns = normal sugary
se = heterozygous sugary enhanced
se-se = homozygous sugary enhanced
sh$_2$ = supersweet

Note: Adjacent plantings of corns of different color kernels will result in some cross-pollination. 8-10 rows' distance is sufficient to maintain purity.

559 Supersweet Jubilee (85 days) F-1 hybrid supersweet with classic mid-season eating quality. Combines the flavor, succulence and corny aroma of old favorite Golden Jubilee with the exceptional sweetness and holding ability of the supersweets. Some think it's the best-tasting of all supersweets. Long 8½ to 9" ears fill to the tip with exceptionally sweet tender yellow kernels, may be harvested over a long period. Refrigerated and stored in plastic bags, ears will hold quality up to ten days. Jubilee is a good one to grow and a good one to market if you can't get it from stalk to kitchen right away. NEW! A=2oz, $2.00, B=½lb, $7.50, C=1lb, $12.50, *not available in larger sizes.*

560 Incredible (85 days) I'm not sure how we overlooked Crookham's superior late-midseason sugary enhanced hybrid Incredible for ten years. But it was a full tassel-length ahead of the competition at the 1996 Loon Song Farm trial, where its handsome 8" tip-filled yellow ears were just scrumptious. Incredible is not just sweet; it really delivers a deep corn taste. Good husk protection and tolerance to rust and Stewart's wilt. A=2oz, $1.25, ~515 seeds, B=½lb, $4.00, C=1lb, $6.80, D=5lb, $30.00, E=10lb, $55.00.

564 Kandy Korn (89 days) Attractive deep purple husks and excellent holding quality make this hybrid yellow corn a real winner at roadside stands. Among the first sugary enhanced varieties to be developed, Kandy Korn has stood the test of time, and continues to enjoy well-deserved popularity. Tolerant to ST, common rust. A=2oz, $1.25, ~235 seeds, B=½lb, $4.00, C=1lb, $6.80, D=5lb, $30.00, E=10lb, $55.00.

BICOLOR SWEET CORN

576 Quickie (71 days) Early bicolor hybrid. Ripens with Sugar & Gold, but more uniform high quality, longer ears, and 12 rows of kernels instead of 10. Crookham release is the best early bicolor we've yet found. A=2oz, $1.25, ~310 seeds, B=½lb, $4.00, C=1lb, $6.80, D=5lb, $30.00, E=10lb, $55.00.

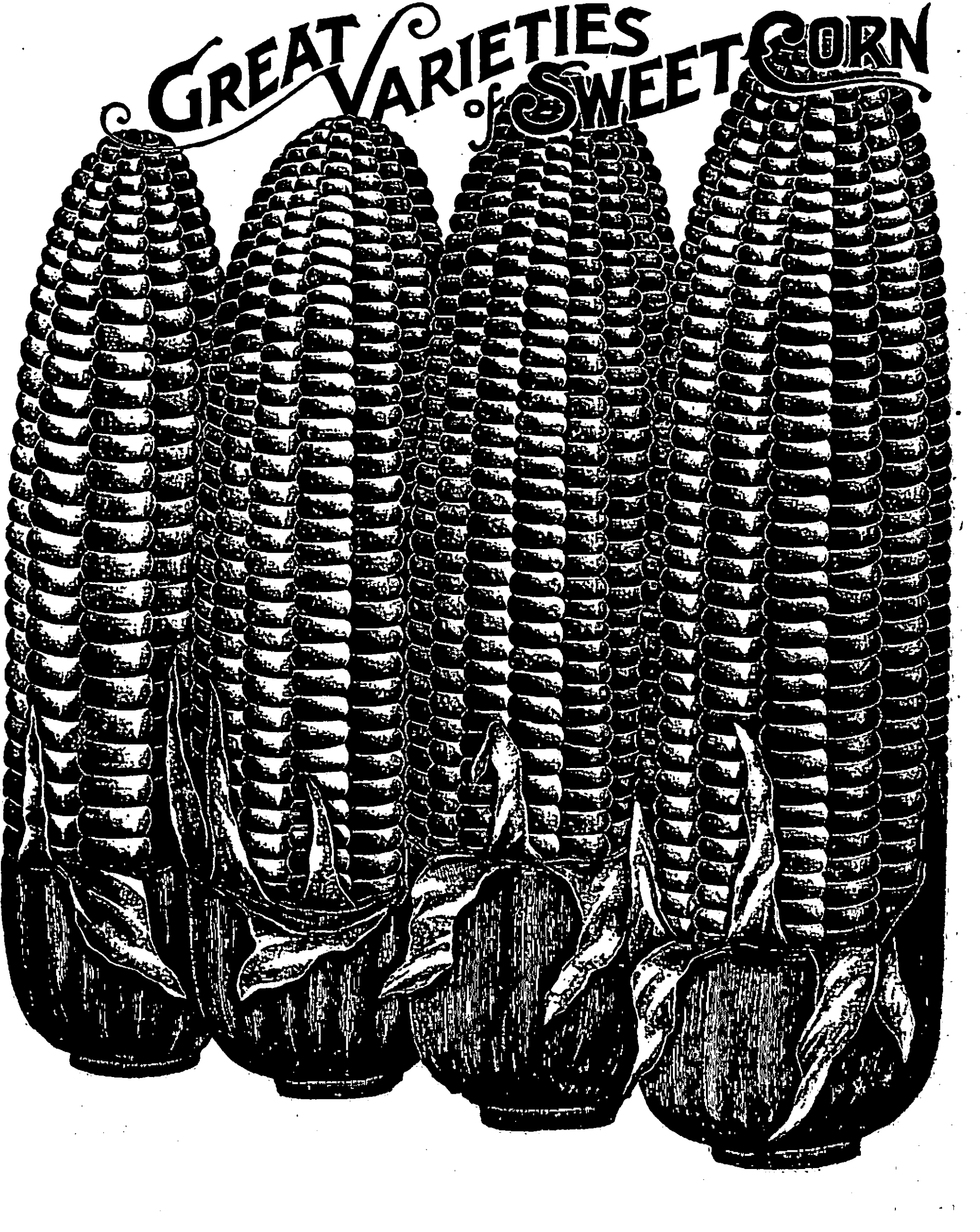
580 Seneca Appaloosa (73 days) F-1 hybrid supersweet. You may have noted our reluctance to jump on the supersweet bandwagon. The early supersweets had a cloying sweetness without much corn flavor, and a devil of a time germinating in our cold soils without fungicide treatment. In Appaloosa the breeders have overcome those faults to produce an early bicolor with good cold soil emergence, admirable seedling vigor, decent yields and premium eating quality. Growers will love its refined appearance, too. The 8" ears are filled to the tips with 16 rows of beautiful bicolor kernels packaged in tight dark-green husks. NEW! A=2oz, $2.00, B=½lb, $7.50, C=1lb, $12.50, D=5lb, $50.00, *not available in larger sizes*

582 Dawn (74 days) We regret this bicolor has been dropped by our supplier and is *no longer available*. We recommend **#584 Double Gem.**

584 Double Gem (76 days) A classy bicolor sugary enhanced hybrid for the all-important second-early slot, Double Gem's blocky 8" ears fill well to the tip for a lot of good eating. Rarely have we encountered such sweetness and tenderness in this early a corn. Good cold soil emergence. A=2oz, $1.25, ~355 seeds, B=½lb, $4.00, C=1lb, $6.80, D=5lb, $30.00, E=10lb, $55.00.

602 Lancelot (82 days) We took notice when Loon Song Farm trialers rated this midseason bicolor sugary enhanced hybrid as better than Burgundy Delight in 1995. Lancelot has a lot going for it besides its sweet, tender kernels. It snaps easily, is very drought tolerant, and shows good tip fill. Best-tasting of the 16 varieties in my 1996 trial. A=2oz, $1.25, ~375 seeds, B=½lb, $4.00, C=1lb, $6.80, D=5lb, $30.00, E=10lb, $55.00.

610 Burgundy Delight (84 days) Burgundy Delight is a terrific midseason hybrid with as good flavor as we've yet found in a bicolor. In conditions of high fertility its tall stalks often bear two good 7-8" ears with handsome purple blushes on their husks. Burgundy holds in prime condition in the field longer than almost any other variety. Bicolor corn just doesn't come any better than this! Unfortunately the grower is discontinuing production. *This is the last year Burgundy Delight will be available.* A=2oz, $1.25, B=½lb, $4.00, C=1lb, $6.80, D=5lb, $30.00, E=10lb, $55.00.


GREAT VARIETIES of SWEET CORN

WHITE SWEET CORN

626 Spring Snow (73 days) At last an early white sweet corn with a real corny flavor! No longer will white corn lovers have to wait for Platinum Lady. Now Snow will give you a great start on the season until Lady is ready. Expect 7½" ears of excellent quality for early in the season. Sugary enhanced hybrid. Tolerant to ST, resists lodging. A=2oz, $1.25, B=½lb, $4.00, C=1lb, $8.00, D=5lb, $36.00, E=10lb, $70.00.

636 Luther Hill (82 days) We may have been a year or two ahead of the market when we first offered this delicious heirloom white in 1995, but we're delighted your interest has enabled us to keep it around. Developed by and named for Luther Hill of Andover Township, NJ, in 1902, and one of the parents of the venerable Silver Queen, Luther Hill was the most popular sweet corn in New Jersey before the hybrids took over. "I remember driving to different farmstands with my father in the '60s in New Jersey looking for it," recalls one customer. If you desire those perfect 8" ears so often depicted in the glossy catalogs, open-pollinated Luther Hill is the wrong choice. But if you want 2-3 surprisingly sweet and cunnin' 5" ears on each modest 4' stalk, Luther will deliver. A great way to get reintroduced to old-timey sweet corn, and you can save your own seed. Seed in short supply, order early. A=2oz, $1.25, B=½lb, $4.00, *not available in larger sizes.*

646 Platinum Lady (83 days) I was incredulous when I heard that Crookham was discontinuing production of Platinum Lady. Long the highlight of my sweet corn season, Lady will be sorely missed. The most attractive as well as the most tasty of all sweet corns, Platinum Lady is irreplaceable. No other corn can boast its perfect balance between corny and sugary, its sparkling sweet tender kernels which hold superb quality over a long picking period and its decorative purple leaves. Roast a few ears with some new potatoes, that's good eating! We bought a ton of seed to keep Lady around a few years longer. So stock up, and enjoy it while you can. Our thanks to those who wrote Crookham to express their displeasure. Crookham is replacing Lady with a variety called Argent, which they claim is superior. I did not find it so and believe the real reason for their decision, like so many others in the seed trade, can be found in the name of the replacement, which means "money" in French. A=2oz, $1.25, ~255 seeds, B=½lb, $4.00, C=1lb, $6.80, D=5lb, $30.00, E=10lb, $55.00; 25lb, $125.00.

658 Silver Queen (96 days) White hybrid which has long set the standard for late-maturing sweet corn. Large handsome ears, with glossy white creamy sweet kernels that fill to the very tips. Although risky in short-season areas, it ripens for us most years a few days before Common Ground Fair in late September, sneaking in just ahead of our first killing frost. I can't think of a better way to end the corn season. *Caution: germinates poorly in cold soil.* Tolerant to NCLB, ST. A=2oz, $1.25, ~255 seeds, B=½lb, $4.00, C=1lb, $6.80, D=5lb, $30.00, E=10lb, $55.00.

POPCORN See also #5940.

663 Japanese Hulless Popcorn (72 days) Ever wonder how they raise those miniature ears you find in Chinese cuisine? They use this open-pollinated variety. Harvest the baby ears around five days after silks appear. The fingerlike ears are delicious in hors d'oeuvres and stir-fries and make excellent pickles. Or allow ears to grow full size for popcorn which will take 110 days. The 5' plants each bear three to six 4" ears with white kernels. A=2oz, $1.25, B=½lb, $4.00, C=1lb, $6.80, D=5lb, $30.00, E=10lb, $55.00.

666 Strawberry (95 days) Highly decorative maroon 2" ears which taper slightly to the tip. Colorful kernels pop into a white popcorn. Old heirloom variety. A=2oz, $1.25, ~800 seeds, B=½lb, $4.00, C=1lb, $6.80, D=5lb, $30.00, E=10lb, $55.00.

678 Robust White Popcorn (95 days) Also known as 21-82W. It pops! And doesn't stop. This early white hulless popcorn has the same great eating quality as White Cloud—crisp and tender, light and flaky—but with a better yield of larger kernels on 7" ears. The 6' plants have the stalk strength to survive September storms intact. Replaces White Cloud. NEW! A=2oz, $1.25, B=½lb, $4.00, C=1lb, $6.80, D=5lb, $30.00, E=10lb, $55.00.

DRY FIELD CORN

688 Mandan Bride (98 days) This colorful flour corn is believed to have originated with the Mandan tribe of Minnesota and North Dakota. I love stringing the many-hued ears on a line as a way of completing the drying process and of celebrating the beauty and bounty of the harvest. Seed grown in Maine. A=2oz, $1.25, ~225 seeds, B=½lb, $4.00, C=1lb, $6.80, *not available in larger sizes.*

PEAS *Pisum sativum*

2 oz packet sows 30 ft, 1 lb. sows 240 ft. Primitive forms of pea seed have been found dating back to the Swiss Lake dwellers, perhaps 5,000 years ago. Street vendors in ancient Athens served hot pea soup to passers-by, ancient Romans attending the theatre ate fried peas in lieu of popcorn. Young plants very hardy but frost stops production at the blossom or pod stage. Like cool, moist weather; dislike heat. Customer Polly Loré, who gardens in Willow, Alaska, reports that peas grow twice as high there as in the lower 48 and keep producing till frost! Sow as early as ground can be worked for best yields. All peas produce more when staked; varieties over 2½' must be supported. Plant 8-10 seeds/ft. in rows 3' apart (5' if very tall varieties). Early morning picking retards spread of powdery mildew disease and ensures best flavor. If you love peas as much as we do, you may want to try for a fall crop. Timing is crucial, as peas ripen slowly in the cool of September, and frost will halt production. We recommend 1st week July planting for fall crop in central Maine. Warmer areas try mid July. Rogers Bros. in Idaho controls most of the world's pea seed production. Recently, we have not been happy with their selection criteria. We have begun our own program to keep superior home garden pea varieties in the trade. In 1993 Nikos Kavanya and I visited Will Bonsall of Scatterseed Project, curator for the Seed Savers Exchange pea collection. We sampled dozens of pea varieties, selecting several for further investigation in our 1994 trials and one for introduction in our 1995 catalog. Over the next 5-10 years we hope to reintroduce several superior varieties.

SHELL PEAS

710 Coral (53 days) PVP. Makes harvesting peas before July 4th a cinch, even in cold pockets. The best quality early pea we've yet found, and an instant best-seller in 1994. Coral started producing for us in 1994 on June 29 and was heavily laden in early July. Was even earlier in 1995, bearing almost its entire crop by July 1. Short vines barely surpass 2' and tend to set earliest pods low. Good yields. Resists F1, PLR. A=2oz, 80¢, ~235 seeds, B=½lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.00; 25lb, $45.00; 50lb, $85.00.

720 Maestro (55 days) Early Green Arrow-type resistant to powdery mildew. Once our most popular pea, now trails Green Arrow and Coral. Extremely heavy yielders under favorable conditions. Set record in our '82 trials with almost 50 pounds per 100 row ft. Easy to pick because long pods fill out only as peas ripen. 3' vines. 8.28 peas per pod in our 1995 trial. Not as sweet as Early Frosty or Lincoln; quality deteriorates quickly after picking. Not a good shipper. Tolerant to PEMV, PM, YBM, W. A=2oz, 80¢, B=½lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.00; 25lb, $45.00; 50lb, $85.00.

732 Early Frosty (60 days) Outstanding quality and sweetness, excellent for freezing. Tricky to pick because it is best before the pods are completely filled, but one of the easiest to shell. Holds quality for a long time after picking. Vines grow up to 3'. Susceptible to powdery mildew; performs best in early sowings. A dependable yielder every year, Frosty was a spectacular performer during 1992's exceptional pea season, producing more than 42 pounds per 100 row feet. My favorite. Resistant to W. A=2oz, 80¢, B=½lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.00; 25lb, $45.00; 50lb, $85.00.

740 Patriot (62 days) Crop failure. *Regret unavailable in 1998.* We hope to have back in 1999.

748 Little Marvel (63 days) Old-timey home garden favorite bears tightly packed nearly round pods on 18" vines. Very sweet. Surprising yields for such a dwarf plant. Introduced to the US in 1908. A=2oz, 80¢, ~250 seeds, B=½lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.00; 25lb, $45.00, 50 lb, $85.00.

754 Top Pod (64 days) PVP. Has heat resistance to match Wando's with higher yields. Bore at Shooting Star Farm throughout the warm August of 1993. Powdery mildew resistant. 2½' tall, with good flavor for a summer pea. A=2oz, 80¢, B=½lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.00, 25 lb, $45.00; 50lb, $85.00.

760 Green Arrow (65 days) Sets the standard for mid-season varieties. Long pods with up to 10 peas per pod on vines up to 3'. Very heavy yielding, was especially vigorous in 1997's good pea season. Easy to pick because pods tend to set in pairs at the top. Our most popular pea, sold over 900 lbs. of seed in each of the last two years. Tolerant to F, DM, CTV, W. A=2oz, 80¢, ~270 seeds, B=½lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.00; 25lb, $45.00; 50lb, $85.00.

772 Miragreen (68 days) We selected Miragreen in 1989 after it wowed us in the trials, but we couldn't locate a source for the seed. We grew it again from Will Bonsall's collection in 1994, and this time we tracked it to the J.W. Jung Seed Co and then to Ferry-Morse. The richness of Miragreen's dark green pods is unsurpassed—matched only by the flavor of the peas within. Of the 13 varieties we trialed in 1989, Miragreen ranked highest for taste, chosen ahead of several varieties we'd listed for years. It set a farm record with a whopping 8.7 peas per pod in 1997. Miragreen has some ability to perform in hot, dry conditions and is excellent for freezing. 4' vines require staking. A=2oz, 80¢, ~315 seeds, B=½lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.00; 25lb, $45.00; 50lb, $85.00.

780 Lincoln (70 days) For $250,000 you can spend a night in the Lincoln bedroom of the White House. For 80¢ and a little work you can enjoy a bowl of Lincoln peas. Which do you think is the better deal? Lincoln (the pea) celebrates its 90th birthday this year. I join many in rating this old favorite the sweetest pea. I never fail to plant at least one row per season for the best garden grazing. Mid season. Vines up to 3' with 3-3½" slender curved pods. Susceptible to powdery mildew. Tolerant to W. A=2oz, 80¢, ~210 seeds, B=½lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.00; 25lb, $45.00; 50lb, $85.00.

788 Mayfair (72 days) We regret that Rogers Bros. has discontinued producing this marvelous pea, and we still haven't found a reliable seed grower. Is there a Western pea grower who'd like to take this on? *Not available this season.*

792 Alderman or Tall Telephone (75 days) Another old-time favorite, and one of the best-tasting, introduced by noted pea breeder Thomas Laxton around 1891 and first sold by Burpee in 1901. Alderman and Tall Telephone are considered synonymous today, although U.P. Hedrick makes a distinction between the two in his 1928 classic Peas of New York. He says both derived from Telegraph, a variety originated in 1877. Alderman boasts vines of 5-6' or more. Polly Loré writes from Alaska, "I would have liked to plant Telephone, but don't dare!" Pods avgd. almost 5" with 8.3 peas per pod, best of the 11 varieties in our 1989 trial. Resistant to W. A=2oz, 80¢, B=½lb, $2.10, C=1lb, $3.50, D=5lb, $13.50, E=10lb, $22.00; 25lb, $45.00; 50lb, $85.00.

SOUP PEAS

796 Holland Capucijners (85 days) We are seeking a seed grower for this unique heirloom. *Sorry, not available this season.*

INOCULANT

798 Legume Inoculant for peas and beans, size B treats 8#, size C treats 60#. Back on our seed order sheet by popular demand. Can also be ordered from the Garden Supplies section (#8501-2). Other inoculants are available only in the Supplies section (#8504-7). B=$2.10, C=$3.50.

I had rather have a handful or two of dried pease.
A Midsummer-Night's Dream IV, i, 41

Calvin Lamborn

Dr. Calvin Lamborn was just out of graduate school when Gallatin Valley Seed Co. hired him as a breeder. Working with Dr. M. C. Parker, Lamborn set out to solve several problems associated with edible pod peas–primarily the twisting, buckling and distortion of the pods.

Modern sugarsnaps owe their existence to a serendipitous find in 1952 and to Dr. Lamborn's curiosity. In the course of their work together Dr. Parker showed Lamborn a tight-podded rogue that he had discovered seventeen years earlier. Curious as to why the pod of this pea was so tight, Lamborn sliced it open and noticed that its walls were much thicker than those of other pod peas. Then he decided to cross this rogue with a snow pea, hoping the thick wall might counteract the twisting and buckling of the snow pea. From this first cross came an entirely new class of edible podded peas, with plump pods, thick walls and delicious sweetness at full maturity.

Well, not entirely new. Snap peas were around in the 19th century. At least two other companies had tried unsuccessfully to reintroduce them as "butterpeas" in the 20th century.

This time the **#892 Sugarsnap** was awarded a gold medal by the AAS Committee in 1979, becoming a smash success. Lamborn put Gallatin Valley on the home garden map. He went on to produce # 860 AAS Sugar Ann, Sugar Bon, Sugar Mel and Sugar Rae, dwarf varieties with more disease resistance, though less taste than Sugarsnap. In 1991 Lamborn won a third AAS with his Kentucky Blue Pole Bean, a cross between Kentucky Wonder and Bush Blue Lake.

EDIBLE PODDED PEAS

Culture same as shell peas. Snow peas should be harvested before pods fill out. Snap peas taste sweetest when completely filled. A common mistake is to pick snaps too soon. Young snap plants may be harvested for greens, good in mesclun or lightly cooked.

SNOW PEAS

808 Dwarf Grey Sugar (59 days) If you're looking for a snow pea with purple flowers, this old standby dating all the way back before 1773 is the best we know. Burpee sold it for 15¢ per packet and 70¢ per pound in 1955. "Dwarf" refers not to its vines which grow 30" but to its elegant thin 2½-3" pods which should be harvested often for classic appearance and great stir fries. Resistant to F1. A=2oz, 80¢, B=½lb, $2.10, C=1lb, $3.50, D=5lb, $16.50, E=10lb, $26.00; 25lb, $55.00; 50lb, $105.00.

812 Dwarf White Sugar (59 days) Although some strains go back to the 1800s, ours is the 1941 Agway introduction. 3' vines produce abundant early yields at top of plants. Easy to pick. Pods small (2-2½") sweet and tender. Susceptible to yellows. ~270 seeds, A=2oz, 80¢, B=½lb, $2.10, C=1lb, $3.50, D=5lb, $16.50, E=10lb, $26.00; 25lb, $62.50; 50lb, $120.00.

818 Oregon Giant (60 days) A giant selection from a giant breeder, Oregon Giant is distinguished for its rich green fat wide 4-5" pods, which are good for stir fries, steaming and eating out of hand. Staffer Susan Kiralis rated them by far the sweetest variety, both raw and steamed, of the ten we grew in 1996. Will retain sweetness so they may be picked a little plumper than the thin-podded varieties. We recommend staking the intermediate 3-4' vines. Another breeding coup by Dr. James Baggett at Oregon State University, introduced 1991. Resistant to PEMV, PM and F1. NEW! A=2oz, 80¢, B=½lb, $2.10, C=1lb, $3.50, D=5lb, $16.50, E=10lb, $26.00; 25lb, $55.00; 50lb, $105.00.

819 Blizzard (61 days) The best dwarf snow pea, unfortunately not available because Rogers Bros. has discontinued production. Blizzard is a patented variety for which we cannot legally grow commercial seed crops until the year 2005. Blizzard is a perfect example of why the Plant Variety Protection Act is not in the best interests of gardeners and farmers. *Not available this season.*

826 Oregon Sugar Pod II (62 days) Short-vined snow pea from Oregon State University. Pods 4" long, vines 2-2½'. Difficult to pick because fruit tends to set within foliage. Tolerant to PM, resistant to W, tolerant to PEMV. Good choice in sandy soils or under dry conditions. A=2oz, 80¢, ~210 seeds, B=½lb, $2.10, C=1lb, $3.50, D=5lb, $16.50, E=10lb, $26.00; 25lb, $55.00; 50lb, $105.00.

842 Mammoth Melting Sugar (72 days) The standard climbing snow pea. Vines grow 5-7'. Very heavy yields of 4-5" pods. Continues to produce if kept picked clean provided powdery mildew does not strike. Very sweet eaten raw as well as sautéed. Heirloom predates 1906. A=2oz, 80¢, B=½lb, $2.10, C=1lb, $3.50, D=5lb, $16.50, E=10lb, $26.00; 25lb, $55.00; 50lb, $105.00.

846 Osaya Endo (72 days) We are still looking for a reliable seed crop grower. *Not available this season.*

SNAP PEAS

860 Sugar Ann (58 days) PVP. 1983 Silver All-America winner from Sugarsnap breeders Gallatin Valley. Dwarf 2' vines. The earliest snap pea, ripening June 21 in our trials. Very good quality, sweetest of the dwarf snap peas. Not as heavy yielding as tall Sugarsnap. Use to start the season. Resistant to W. A=2oz, 80¢, ~235 seeds, B=½lb, $2.10, C=1lb, $3.50, D=5lb, $16.50, E=10lb, $26.00; 25lb, $60.00; 50lb, $110.00.

884 Sugar Lode (65 days) Rogers Bros. invited us to name their release. Our choice stems from the tremendous yields of these bushy 3' plants in our trial. We harvested 34 pounds in concentrated sets from only 52' of row. Although the pods are slow to sweeten, they have a good pea flavor which becomes sugary when they are full. Recommended for second early crop after Sugar Ann and for late crop after Sugarsnap because they hold well in heat. Rogers has discontinued seed production; we've purchased all their remaining stock, a 3-year supply. A=2oz, 80¢, ~215 seeds, B=½lb, $2.10, C=1lb, $3.50, D=5lb, $16.50, E=10lb, $26.00; 25lb, $60.00; 50lb, $110.00

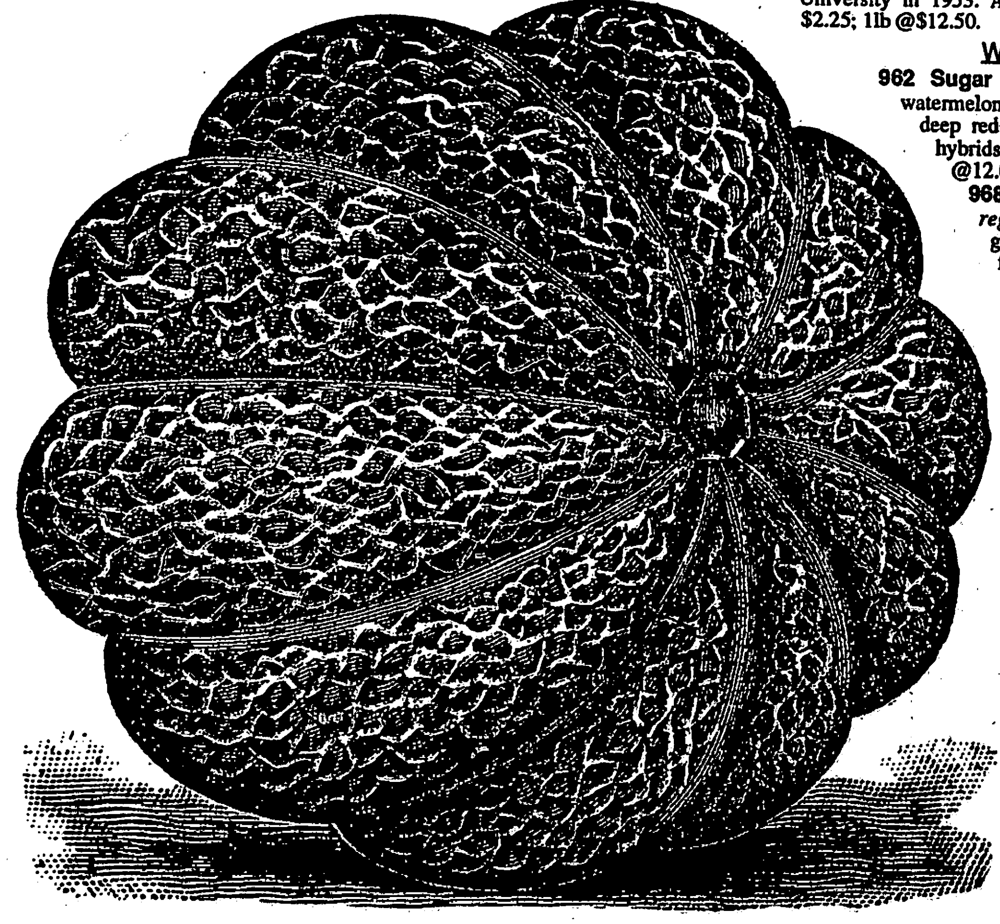
892 Sugarsnap (68 days) This breeding coup by Calvin Lamborn was voted the #1 all-time AAS. One of the very best raw treats in the garden, far tastier than the dwarf varieties, although more work to grow. Tall Sugarsnap vines grow 5-7' and need strong stakes. Pods reach superb sweetness only when completely filled. Then they are incomparable. *Caution: We found the new Super Sugarsnap in our trial to be more susceptible to pea wilt. Insist on the original Sugarsnap.* Resistant to W, very susceptible to powdery mildew. A=2oz, 80¢, ~225 seeds, B=½lb, $2.10, C=1lb, $3.50, D=5lb, $16.50, E=10lb, $26.00; 25lb, $60.00; 50lb, $110.00.

You Can Vine-Ripen Melons In Maine: Here's How

Our extensive trials enable us to offer a superb selection of short-season varieties. Melons are a tender crop with high nitrogen requirements. They love heat, cannot stand frost, and can be damaged by night temperatures below 40°. They require some extra fussing, but oh! are the results ever worthwhile!

- Note days to maturity and select varieties that will ripen in your climate. Earliqueen and Yellow Doll are surest bets.
- Start indoors around May 1 in peat pots, 2 or 3 seeds to a pot. Melons resent transplanting but will take if their roots are not disturbed.
- Prepare hills in advance with liberal amounts of well-rotted manure or compost. Don't place melons next to vigorous crawling plants like cucumbers and winter squash. Pollen from adjacent cucumber flowers can cause melons to be bitter.
- Transplant at the onset of a heat wave after all danger of frost is past. Water heavily and, if soil is dry, place a temporary hay mulch around plants until a soaking rain comes.
- Except during droughts, use floating row covers over plants, but to avoid abrasion do not allow covers to touch plants.
- Use black or clear plastic mulch between plants.
- Use a foliar feeding program to speed ripening.
- Remove row covers before buds open. Replace them when you don't desire any more fruit to set.
- To reduce rot loss, rotate ripening melons occasionally. To reduce mouse damage, place ripening melons on bricks.
- Inspect your patch *daily* at ripening time. Check fruits for aroma and color and pull gently on those that appear to be ripe. They are ripe if the pressure causes them to slip from the vine. Charentais melons should be harvested just before this full slip stage. For watermelons, thumping should produce a low, hollow sound. Spread thumb and forefinger and press hard on fruit. If you feel any give, watermelon is ripe.
- Enjoy an incomparable taste treat!

Over the years, we've had wonderful melon trials at Jeanne Griffin's, and Shooting Star Farm, but our 1996 and 1997 trials of over 50 varieties at Jill and Peter de Bethune's were our best ever, enabling us to add six delectable melons to our selection.



> ...smelling so sweetly–all musk, and so rushling, I warrant you, in silk and gold...
> *The Merry Wives of Windsor* II, ii, 69

OPEN-POLLINATED MELONS

Cantaloupe, muskmelon etc. 1 oz=about 960 seeds. Watermelon 1 oz=about 670 seeds. Days to maturity are from date of transplanting.

MUSKMELON *Cucumis melo*

908 Jenny Lind (76 days) Johanna Maria Lind (1820-1887), better known as beloved soprano Jenny Lind, was billed as the Swedish Nightingale. She toured America with P.T. Barnum from 1850-1852 thrilling audiences with her glorious bravura singing. This heirloom melon, contemporaneous with her early career, was named for her, and remained very popular until after her death. Despite her sparse spindly vines, Jenny is a prolific bearer of small, heavily netted 1 lb. fruits which may be unique among melons for having a turban on their blossom end. Jenny's soft juicy lime green interior flesh is so sweet that it just might make you sing. NEW! A=1/16oz, 75¢, B=1/4oz, $1.25, C=1/2oz, $2.25.

914 Green Nutmeg (80 days) These aromatic heavily netted gems weigh 2-3 lbs apiece with deliciously sweet spicy lime green flesh. Not too imposing on the outside, but a good surprise inside! If subjected to very hot weather, Green Nutmeg may develop a bitter cucumber-like taste. Heirloom dates back to the 1830s, may be the same variety as Early Hanover. Berne, IN seedsman C.P. Hischy sold it for a nickel a packet in 1890. A=1/16oz, 75¢, B=1/4oz, $1.25, C=1/2oz, $2.50.

926 Golden Gopher (85 days) Called by Jeanne Griffin "the choice of the discriminating melon lover," this heirloom was developed in the 1930s at the University of Minnesota. Glenn Drowns of the Seed Savers Exchange was the original source for the seed which Griffin grew out and multiplied enabling Fedco to return Golden Gopher to commerce after many years' absence. Heavily ribbed fruits have deep, deep orange flesh of incomparable eating quality. Sometimes called "Pop Open" melons because of their tendency to split open when ripe. We are pleased to have an abundant supply of seed. Resistant to F. A=1/16oz, 75¢, B=1/4oz, $1.25, C=1/2oz, $2.25.

940 Delicious 51 (88 days) Returned to our list in 1996 after a 14-year hiatus. Delicious 51 is considered by some to be the best open-pollinated muskmelon for cold climates still commercially available. One trialer at the first annual Alna melon tasting celebration compared its flavor to that of fine sorbet. Sweet 3 lb. fruits with medium to sparse netting over distinct ribs turn yellow at maturity, may be soft when ripe. Dark orange interiors with sweet juicy aromatic flesh. Developed by Dr. Henry Munger of Cornell University in 1953. A=1/16oz, 75¢, ~43 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25; 1lb @$12.50.

WATERMELON *Citrullus lanatus*

962 Sugar Baby (80 days) The standard northern icebox watermelon grows 8-10 lb. fruits, dark green on outside and deep red on inside. Flesh quality grainier than comparable hybrids. A=1/16oz, 75¢, B=1/4oz, $1.25, C=1/2oz, $1.75; 1lb @12.00.

968 Cream of Saskatchewan Crop failure. *We regret not available in 1998*. We have a new seed crop grower for the 1998 season and high hopes for our first abundant seed supply in 1999.

980 Quetzali (85 days) PVP applied for. The best open-pollinated watermelon I've ever tasted, sweet (12% sugars) with some substance. So good I was shocked when I found out it is not a hybrid! 9-12 lb. fruits with dark-green rind splotched with lime-green sponge prints. Even more attractive on the inside where the dense pink flesh is almost uninterrupted by seeds! The closest we offer to a seedless melon. This find came from, of all people, Rogers Bros. I didn't know they were even working with open-pollinated melons any more, but I'd love to see more developments from them like Quetzali. *Caution: Requires a sharp knife, strong wrist and sure stroke to cut open its dense rind.* Resists ANTH1. A=1/16oz, 75¢, B=1/4oz, $1.25, C=1/2oz, $2.25.

992 Moon and Stars (100 days) Here is a challenge worthy of the Maine melon-grower's mettle. This now-famous unique heirloom watermelon pre-dating 1910 was rescued from extinction by the Seed Savers Exchange. Imagine how Kent Whealy felt when he discovered it had been maintained by Merle van Doren in Missouri. It needs a lot of heat to set fruit, but can ripen in a good season. Although Shooting Star Farm raised an 18 1/2 pounder in 1991, most fruits are smaller in our cold climate. Rind is dark green with beautiful yellow spots which range in size from little peas (the stars) to a silver dollar or larger (the moon). Foliage is also spotted (looks diseased to the uninitiated). Flesh is pink, somewhat grainy, very sweet. A=1/16oz, 75¢, B=1/4oz, $1.25, C=1/2oz, $2.25.

HYBRID MELONS

CHARENTAIS *C. melo*

1014 French Orange (80 days) Replaced Pancha, and like Pancha, a cross between a French Charentais melon and a sweet American cantaloupe. The first full-sized melon with Charentais parentage that usually vine-ripens in our short season without rotting. Ready to harvest when the lightly netted 2-3 lb. fruits develop a yellow-cream blush and become aromatic. They will slip when given a tug. How good is their tangy deep orange flesh? I mistook one for a Golden Gopher in a blind taste test. That's about as strong a compliment as I could bestow on any melon! A=1g, $1.40, ~33 seeds, B=3g, $4.00, C=15g, $17.00.

CANTALOUPES & MUSKMELONS *C. m.*

Cantaloupes are named for the papal gardens of Cantalupo, Italy, where some historians say the first cantaloupe was grown. They are smooth-skinned or lightly netted with few ridges. Muskmelons are usually heavily netted and deeply ribbed with larger seed cavities than cantaloupes. One cup of diced cantaloupe contains 3 milligrams of beta-carotene, which the body can convert to more than the recommended daily allowance of vitamin A, and 68 milligrams of vitamin C, more than the RDA. Cantaloupes develop highest sugar content when daytime temperatures exceed 80° and night temperatures are 60-75°. See also **#6820-22.**

1024 Earliqueen Muskmelon (77 days) Developed by Dr. Brent Loy at UNH, Earliqueen is a reliable early producer of 2-3 lb. fruits of uniformly good quality. A good melon to start the season, its orange flesh is remarkably sweet for such a precocious ripener. Won raves at a taste test of apprentices at Hidden Valley Farm with such comments as "YUM,YUM, I like this one," "great all around," "best melon," "rich, deep." A=1g, $1.40, ~47 seeds, B=3g, $4.00, C=15g, $13.50.

1030 Passport Cantaloupe (77 days) A delicious green-fleshed cantaloupe developed by Dr. Loy, which ripens more than a week earlier than Rocky Sweet. For maximum sweetness harvest when skin color has turned yellow. If cool wet weather causes cracking before full ripening, harvest at first yellow blush. Texture is smooth, color ranges from whitish-green near cavity to darker green towards rind, with a subtle delectable—almost tropical—taste. Tolerant to ANTH and GSB. A=1g, $1.40, ~33 seeds, B=3g, $4.00, C=15g, $13.50.

1038 Earligold Cantaloupe (78 days) Much more flavor than Sweet Granite or Alaska. Makes a concentrated set of 2 1/2 lb. netted orange-fleshed fruits of uneven quality. The best ones ripen during warm spells to a rich, musky flavor, but in less ideal ripening conditions some are insipid and watery. Skin will turn buff with a melony aroma when ripe. Inspect patch daily as they ripen; their holding quality is suspect. Tolerant to PM and F. A=1g, $1.40, ~40 seeds, B=3g, $4.00, C=15g, $13.50.

1046 Athena Muskmelon (80 days) Second-favorite behind French Orange in Peter and Jill de Bethune's taste tests. Ripens slightly ahead of Pulsar with nice orange interior color and good sweetness. Oval-round well-netted lightly ribbed fruits average 2 1/2 to 4 lb. An excellent shipper, recommended for commercial growers. Tolerant to F0,1,2 and PM1,2. A=1g, $1.40, B=3g, $4.00. *Not available in larger sizes*.

1054 Pulsar Muskmelon (82 days) "My total production (from five hills) was 265 pounds (56 melons) of the most aromatic and delicious muskmelon I've ever tasted—in my seventy-five years. At least a dozen of our friends told me they were absolutely the best ever. The variety—you may have guessed—Pulsar! What a melon!" wrote Alden McCutchan of Kenyon, MN, after his 1996 season. Pulsar's large deeply ribbed fruits consistently average 4-6 lb., reaching as large as 7 3/4. Orange flesh is slightly grainy, exceptionally sweet and aromatic. Ripens dependably with consistent high quality and a muskiness that makes you go back for more. What a treat! Very early for such a big melon—Alden's first ripened on Aug. 15. Tolerant to PM, F. A=1g, $1.40, B=3g, $4.00, C=15g, $16.00.

1060 Sunrise Cantaloupe (85 days) Wanted: a few more adventuresome customers to try this most unusual tropical melon with a somewhat grainy texture yet subtle interplay of flavors and colors. I predict you won't be disappointed. This netted 2-3 lb. light yellow melon grew on me as I kept sampling it. Exquisitely flavored aromatic orange flesh closest to the seed cavity dissolves to a band of yellow then green flesh of increasing toughness as you move toward the rind. Especially delicious in fruit salad, but I could get addicted to eating these for breakfast without any other fruits. A=1g, $1.40, B=3g, $4.00, C=15g, $13.50.

1082 Burpee Hybrid Muskmelon (88 days) The first full-sized vine-ripened muskmelon I ever ate was a Burpee Hybrid. What a revelation! The musky succulent 3-4 lb. fruits have been the choice of discerning market growers for more than forty years. When Burpee introduced it in 1955 it was the most expensive vegetable packet in their catalog at 75¢ for 40 seeds, roughly equivalent to $4.50 in 1997 dollars. Fruits heavily netted with distinctive ribbing and delectable orange flesh. Ripe at full slip. Tolerant to PM. A=1g, $1.40, ~33 seeds, B=3g, $4.00, C=15g, $16.00.

1090 Ambrosia Cantaloupe (91 days) This sweet juicy salmon-fleshed melon is the choice of discriminating growers in areas where the season is sufficiently long. Round fruits average 4 lb. with thick, almost silky smooth flesh and very small cavities. The taste lives up to its name. Can harvest when fruits begin to blush yellow before full slip, and finish ripening indoors, as fruits tend to crack before full slip in cool conditions. *Caution: Not adaptable in short-season areas.* A=1g, $1.40, ~33 seeds, B=3g, $4.00, C=15g, $16.00.

HONEYDEW *C.m.* (inodorus group)

1096 Earli-Dew Honeydew (88 days) A delicious green-fleshed smooth-skinned melon suitable for cool northern areas. 2 1/2-3 lb. fruits blush yellow when mature. Tolerant to PM and F2. A=1g, $1.40, B=3g, $4.00, C=15g, $18.00.

CRENSHAW *C.m.* (inodorus group)

1098 Burpee Early Hybrid Crenshaw (91 days) We were very "meloncholy" when Petoseed dropped its Honeyshaw Crenshaw a few years ago. Our lengthy search for a suitable replacement has now borne fruit. Very reminiscent of Honeyshaw, Burpee Crenshaw yields teardrop-shaped 7-10 lb. fruits with firm thick orange indescribably tangy flesh. Flavor is smooth, subtle, refreshing, but not musky. It passed the ultimate melon test by inspiring total passionate abandon among friends of Jill de Bethune who asked her, "What in the world was that melon you gave us?" Rind turns from green to blush yellow as it ripens. Will mature in most of our sales area. NEW! A=1g, $1.40, B=3g, $4.00, C=15g, $17.00.

WATERMELON *Citrullus lanatus*

U.S. per capita consumption of fresh watermelon has increased 50% since 1980.

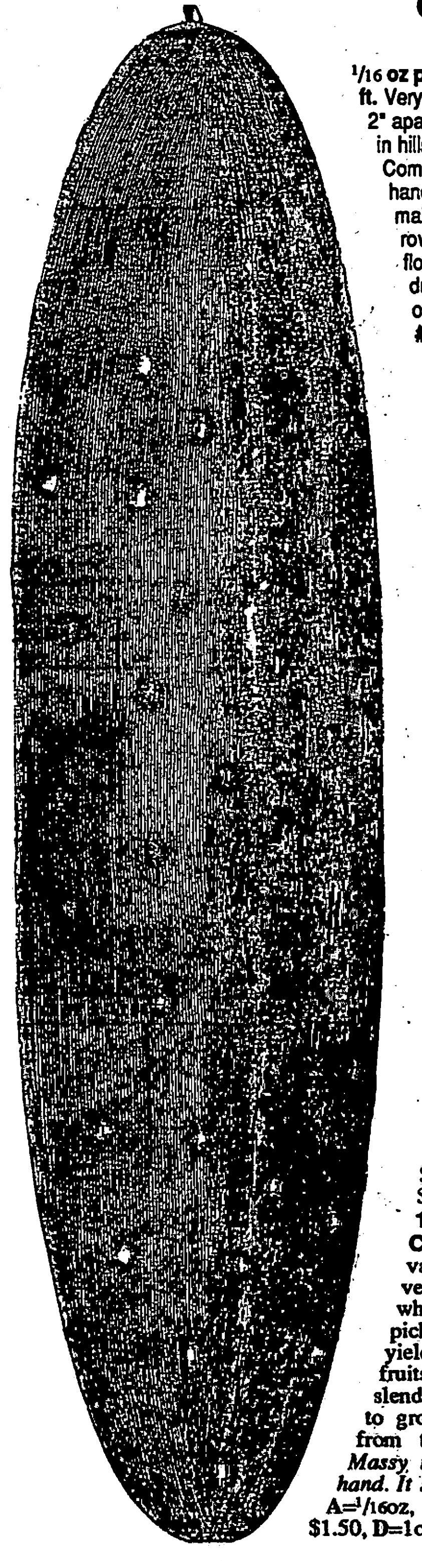
1110 Yellow Doll (75 days) Our customers, knowing that the sweet yellow flesh of Yellow Doll cannot be matched by any of the red varieties, have made it our best-selling melon year after year. Doll's 4-7 lb. icebox fruits on a semi-compact vine have a light green rind with dark stripes. Earliness and superb quality make Yellow Doll the best. Vine-ripens even when all others fail. A=1g, $1.40, ~29 seeds, B=3g, $4.00, C=15g, $13.50.

1142 New Orchid (80 days) Turn your watermelon feast into a rainbow of colors with apricot-fleshed New Orchid. The perfect complement to Yellow Doll, almost as sweet and tender, almost as early though with slightly less uniform ripening, fruits a little larger (avg. 7-8 lb.) having fewer seeds. Rind is similar to Yellow Doll's, but with darker green stripes. Like eating a bowl of orange sherbet. Another delectable triumph for the world-class Japanese watermelon hybridizers. Expensive, but enough seed so you can enjoy this treat without having to mortgage the farmstead! A=1/2g, $1.40, ~8 seeds. *Not available in larger sizes*.

1164 Jade Star (85 days) One of our most underappreciated varieties, ripening quickly for such a big melon. Jade Star stole the show in our 1990 watermelon trial, producing round dark green fruit in excess of 10 lbs. Those who tasted the one we brought to our Common Ground Fair booth that fall declared it the most delicious watermelon they'd ever had. Since then we've tried a score of other watermelons without finding any to match Jade's taste. Deep red flesh—similar to that of Sugar Baby but superior in quality—contrasts with its dark rind. Jade is the one red watermelon I would never be without. A=1g, $1.40, B=3g, $4.00, C=15g, $12.00.

1176 Sweet Favorite (86 days) 1978 AAS from Sakata. One of the best oblong watermelons for the North. Consistently produces fruits in excess of 10 lb. We grew a 13-pounder in 1987. Flesh sweet, bright red. Green rind with dark stripes. Tolerant to ANTH and F. A=1g, $1.40, ~20 seeds, B=3g, $4.00, C=15g, $12.00.

1188 Sangria (88 days) The sweetest (12-14% sugars), juiciest watermelon in our trials. These elongated ovals average 10-11 lb. with dark green rind broken by light green stripes. Very heavy yielding even in the unfavorable 1996 growing season. Bright refined red flesh will satisfy the most avid sugar seekers. Sangria, the first hybrid Allsweet type ever developed, has been a big hit on the market. Staffer Tom Levesque's big red juicy Sangria met with much acclaim at our Aug. 23 staff picnic. *Caution: May not ripen in northernmost areas.* Tolerant to some races of anthracnose and fusarium. A=1g, $1.40, B=3g, $4.00, C=15g, $17.00.



CUCUMBERS

Cucumis sativus

1/16 oz packet sows 11 ft, 1 oz about 180 ft. Very tender, will not survive frost. Sow 2" apart in rows 3' apart or 6 per mound in hills 4' apart thinning to 3 best plants. Combat striped cucumber beetles by handpicking early AM when the dew makes them sluggish, or use floating row covers, removing when cukes flower. Pick frequently for best production. Americans eat an average of 106 pickles a year. See also **#6826-6828.**

PICKLING

1212 Express (48 days) F-1 hybrid. This handsome pickler really lives up to its name, cranking out most of its fruits during those first three pickings in July when the market for cukes is still strong. Tolerant to ANTH, ALS, CMV, DM, PM, resistant to scab. A=1/16oz; 50¢, ~57 seeds, B=1/4oz, 95¢, C=1/2oz, $1.50, D=1oz, $2.60, E=4oz, $7.50; 1lb @$30.00.

1226 National (52 days) Not quite as early as Northern Pickler, but tends to hold quality over a longer season. Firm black-spined dark-green fruits are usually quite sweet, rarely bitter. Plants are vigorous, dependable producers. Resists CMV and scab. A=1/16oz, 50¢, B=1/4oz, 95¢, C=1/2oz, $1.50, D=1oz, $2.60, E=4oz, $4.80; 1lb @$8.00.

1232 Calypso (52 days) Heavy-yielding hybrid of gynoecious type. Fruits medium-dark green with white spines. Tolerant to ANTH, ALS, CMV, DM, PM, resistant to scab. A=1/16oz, 50¢, B=1/4oz, 95¢, C=1/2oz, $1.50, D=1oz, $2.60, E=4oz, $7.50; 1lb @$28.00.

1240 Vert de Massy French Cornichon (53 days) A superb variety for gherkin makers. The very spiny fruits should be picked when finger size for delicious tiny pickles. Vines are incredibly high yielding—they just crank out the fruits from July to frost! Fruits are slender, but tend to curve if allowed to grow too large. French heirloom from the 1800s. *Caution: Vert de Massy is too bitter for eating out of hand. It should be reserved for pickling.* A=1/16oz, 50¢, B=1/4oz, 95¢, C=1/2oz, $1.50, D=1oz, $2.60, E=4oz, $10.00.

SLICING

1312 Marketmore 76 (63 days) Probably the leading slicing variety in the Northeast. Dark green 8-8 1/2" fruits show good uniformity. Vines vigorous throughout season. Tolerant to CMV, DM, PM, resistant to scab. Developed by Dr. Henry Munger. A=1/16oz, 50¢, ~ 85 seeds, B=1/4oz, 95¢, C=1/2oz, $1.50, D=1oz, $2.60, E=4oz, $4.80; 1lb @$12.50.

1334 Marketmore 86 (68 days) With Hollar having discontinued Spacemaster 80, we offer Marketmore 86 as the closest substitute. It has a small semi-bush vine for ease of picking, although it is not as dwarf as Spacemaster. Broad disease tolerance (CMV, DM, PM and scab) and more vigor make the quality of its 8" fruits superior to Spacemaster's. Not burpless. A=1/16oz, 50¢, B=1/4oz, 95¢, C=1/2oz, $1.50, D=1oz, $2.60, E=4oz, $4.80; 1lb @$15.00.

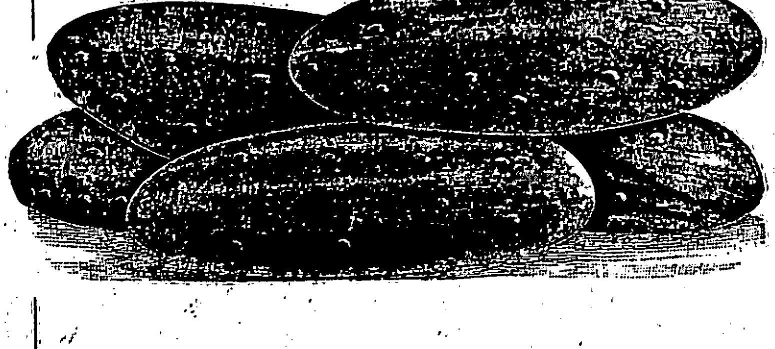
1356 Shantung Suhyo Cross (60 days) F-1 hybrid. Produces a plethora of uniform 12-14" never-bitter sweet-tasting cukes. Even in dry conditions the vines keep making quality fruits which never develop shrunken necks. Our cucumbers were very gracefully curved, although had we provided trellising they would have been straight. Seed comes from Japan and is very expensive. Tolerant to DM, PM, CMV. A=1/2g, 50¢, ~20 seeds. *Not available in larger sizes.*

1372 Lemon (68 days) Salad chefs and backyard gardeners have rediscovered this specialty variety which dates back to 1894. Heavy yields of rounded yellow-skinned 3" fruits shaped somewhat like lemons. Very crisp and sweet; never get bitter and one of the best for eating right out of the garden. My dog Kai has learned to harvest these and play ball with them. A=1/16oz, 50¢, ~57 seeds, B=1/4oz, 95¢, C=1/2oz, $1.50, D=1oz, $2.60, E=4oz, $4.80; 1lb @$16.00.

1382 Amira Middle Eastern (52 days) F-1 hybrid. While no other Beit Alpha type can match the refreshing qualities of Hylares (which the grower discontinued), Amira's 4-5" green smooth-skinned fruits are enjoyably mild and almost completely free of the bitterness quite common in American slicers. Commercial growers: Note that Amira has heavy early sets, starting soon after Express. Tolerant to CMV, DM, PM. A=1g, 50¢, ~33 seeds. *Not available in larger sizes.*

1392 Telegraph Improved European (60 days) Originally developed for greenhouse production, but suitable for growing outdoors if trellised, this European cucumber has long (10-14") slim smooth-skinned fruits of very delicate mild flavor, never bitter. Unsupported vines will produce curved and misshapen fruit. Telegraph is parthenocarpic, meaning it can set fruit without being pollinated, an advantage in cold, cloudy summers. **BACK!** A=1g, 50¢. *Not available in larger sizes.*

1396 Holland (62 days) F-1 hybrid. Runaway winner of my 1995 trials; the best-tasting cucumber I've ever had, but I never expected Fedco could afford to carry it because comparable varieties sell for 50¢ or even $1 *per seed.* Bred for greenhouse culture, Holland produces slender smooth-skinned long, long (12-16") elegant crisp sweet bitterfree cukes—the kind you can find individually plastic-wrapped for a buck fifty apiece in your supermarket. We've taken advantage of a one-time special deal to bring Holland to you at an affordable price. If you grow this parthenocarpic cucumber outdoors, please trellis it for straight fruit. Tolerant to scab. **NEW!** A=1/4g, 50¢. *Not available in larger sizes.*



Henry Munger

In his 55-year career at Cornell University, eminent vegetable breeder and educator Dr. Henry M. Munger has introduced more than fifty varieties of cucumbers alone. Of them all, he points to his work on Marketmore 76 as his single most satisfying achievement. "It had improved color and powdery mildew resistance...it saved a lot of fungicide use," he notes. We have sold more than 22,000 packets (500 pounds) since offering **#1312 Marketmore 76** on our original list in 1979.

Munger's cucumber work encompasses whole lines of Tablegreens, Marketmores, Spacemasters and Poinsetts. The first fusarium wilt-resistant muskmelon, Iroquois, came out of his doctoral research at Cornell in 1941. He also introduced **Delicious 51** muskmelon. Both melons are still widely available today. His work on mildness in storage onions led to the joint release of hybrid Sweet Sandwich.

He has specialized in the production of cultivars, inbreds and breeding lines carrying high levels of tolerance or resistance to diseases. Virtually all U.S. slicing cucumbers carry disease resistance and improved color developed in Munger's breeding program. Disease resistance in summer squash originated from interspecific hybrids made at Cornell.

Probably half of all commercial carrots sold in the U.S. and Europe are hybrids of a chance discovery Dr. Munger made in Orleans, MA in 1953. While picking blueberries, he noticed a wild carrot plant with pink-petaled flowers instead of white. It turned out to be a rare male-sterile that became the mother of hybrid carrot seed production. Through carrot hybridization, plant breeders have increased carotene content and improved taste, uniformity and appearance.

SUMMER SQUASH *Cucurbita pepo*

Packet sows 4-6 hills; 1 oz 40 hills. 200-300 seeds/oz. Tender, will not survive frost. Sow in hills 4 ft. apart, 6 seeds/hill. Thin to 2-3 best plants. Pick squash when they are small for best flavor. Floating row covers can hasten maturity by 1 to 2 weeks. Some folks reported all male and no female blossoms early in the 1996 season. Blame a combination of cool, cloudy, sunless days in July and a declining bee population for the poor pollination. Some experts claim that in the past decade 90% of wild honeybee colonies and 37% of domesticated colonies have been wiped out by mites—a real crisis for cucurbit growers.

ZUCCHINI

1408 Seneca (48 days) F-1 hybrid. Early, very prolific slim medium-green fruits. In the last five years we've sold over 8,000 packages (170 pounds) of Seneca. If all the seeds were sown and 90% germinated they would have grown 350,000 plants and possibly six million zucchinis. A=1/8oz, 75¢, ~20 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00; 1lb @$48.00.

1418 Seneca Butterblossom (51 days) F-1 hybrid. Bred by Robson Seed Farms to produce a prolific quantity of large, firm male blossoms which hold longer than female flowers and are preferred by chefs. Joanna made quesadillas with Butterblossoms and conventional blossoms to compare taste. Two out of three of us chose Butterblossoms for their sweeter creamier milder taste. By the way, it also produces a fair number of zucchinis. Keep them picked to keep the blossoms coming. A=1/8oz, 75¢, ~20 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00, 1 lb @$52.00..

1434 Cocozelle (53 days) Italian-style zucchini with light green stripes, rich flavor. A=1/8oz, 75¢, ~25 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $2.50, E=4oz, $4.00; 1lb @$8.00.

1442 Gold Rush (54 days) F-1 hybrid. Open plant habit and golden color make the cylindrical fruits easy to find. 1980 All-America winner has caught on with home gardeners and market growers. A=1/8oz, 75¢, ~20 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $4.50, E=4oz, $17.00; 1lb @$60.00.

1456 Costata Romanesca (60 days) When you've had one zucchini, you've had them all? We thought they all tasted the same until longtime seed saver Will Bonsall sent us samples of Costata. Deeply striped and ribbed, Costata resembles Cocozelle, but its flavor is distinctive: sweet and mildly nutty. In the 1995 Seed Savers Yearbook, Bonsall called it "the only summer squash worth bothering with, unless you're just thirsty." Incidentally, Costata is good till quite large, the one to grow for the biggest zucchini at the fair. In 1996 ours weighed 21 lb. and got the blue ribbon. A hot seller the past two seasons so we're pleased to have a good seed crop. A=1/8oz, 75¢, ~20 seeds,B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00; 1lb @$38.00.

1466 Tatume (61 days) The original Mexican *calabasita* also popular in Texas, Tatume should be harvested at 3" when it resembles a tiny green slightly elongated pumpkin. Considered by our purchaser Nikos and our supplier Elizabeth Berry of Gallina Canyon Ranch in New Mexico to be "the most flavorful zucchini available on earth." Superb eating quality if picked young; skin too tender to ship. Becomes too woody to eat as it matures, looking like an elongated 5x7" winter squash. Medium-dark green skin color. Vines crawl like pumpkins, so be prepared. After wholesaler Hollar discontinued production, noted cucurbit saver Glenn Drowns maintained Tatume. We returned it to commerce in 1997; now we hope more of you will try it. A=1/8oz, 75¢, ~20 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00; 1lb @$30.00.

LEBANESE

1488 White Bush (50 days) Also called Mid-East or Cousa squashes, Lebanese types are bulbous-shaped light green with white speckles. Robust bushes bear prolifically. Pick fruits when they are young and tender or allow them to fatten for stuffing. Very flavorful. A=1/8oz, 75¢, ~26 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.50, E=4oz, $8.00; 1lb @$15.00.

YELLOW

1506 Sundance (47 days) This F-1 hybrid crookneck ripens almost 2 weeks earlier than standard crookneck! And it keeps right on cranking out until frost finally halts it. We have averaged 18 fruits per plant. A=1/8oz, 75¢, ~40 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $15.50.

1522 Seneca Prolific (51 days) F-1 hybrid. Heavy-yielding yellow straightneck squash for the North. High yields early. A=1/8oz, 75¢, ~47 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00; 1lb @$48.00.

1538 Crookneck (58 days) Deep yellow fruits with bulbous shape and narrow, curved necks. Best when picked young. Dates back to 1700. Offered by C.P. Hirschy in 1890 for a nickel a packet, 85¢ per pound. A=1/8oz, 75¢, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $2.50, E=4oz, $4.00; 1lb @$9.00.

PATTY PAN

1580 Sunburst (52 days) F-1 hybrid. Gourmets call Patty Pans "scallopini," and consider them the most appetizing of the summer squashes. Sunburst is the most attractive of the Patty Pans with its bright yellow skin. 1985 AAS. A=1/8oz, 75¢, ~39 seeds, B=1/4oz, $1.50, C=1/2oz, $3.00, D=1oz, $6.00, E=4oz, $24.00.

1590 Benning's Green Tint (55 days) Sunburst is so popular that we decided also to offer Benning's, its pale green scalloped counterpart. Fruits are most tender at 2-3" diameter. Susan Pierson of Massachusetts rates Benning's as the best-tasting summer squash, "far surpassing Sunburst and other summer squashes—good texture, too." Market grower Alan LePage also lauds its flavor and considers it an underappreciated variety. Hedrick dates this variety back to 1914. A=1/8oz, 75¢, ~34 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $2.50, E=4oz, $4.00; 1lb @$9.00.

> I pray you, commend me to Mistress Squash, your mother, and to Master Peascod, your father. Good Master Pease-blossom, I shall desire you of more acquaintance too.
> *A Midsummer Night's Dream* III, i, 190

WINTER SQUASH *Cucurbita frugalis**

Plant 4-5 seeds per hill. Allow 4-6 feet between hills. Tender, not frost hardy. Heavy nitrogen feeders. Use floating row covers for earlier ripening and cucumber beetle control. Excessive heat and/or drought can prevent blossom set, reduce yields. To improve flavor and storage, field cure for at least 10 days after harvest, covering if hard frost threatens. Store under proper conditions, 50° and 60-70% relative humidity. Approximate seed counts: Acorn, Butternut 280 seeds/oz, Buttercup 160 seeds/oz, Hubbard 120 seeds/oz, Spaghetti 190 seeds/oz.

1604 Burpee's Early Acorn Hybrid (84 days) F-1 hybrid. I was very surprised to find out that acorn squash can be this good. Sweeter and drier than other acorns we've tried, Burpee's top-quality fruits get up to 4 lb., yet ripen a week ahead of Table Queen. Saves some space with its large bush habit. Price reduced because we got a special deal. A=1/4oz, 75¢, ~70 seeds, B=1/2oz, $1.25, C=1oz, $2.25, D=4oz, $3.90, E=1lb, $14.00.

1608 Table Queen Acorn (90 days) 1 1/2-2 lb. black-green ribbed fruits. Good for baking. Dry flesh is best eaten within 3-4 mos. after harvest. Variety is 85 years old in 1998. Its 1953 wholesale seed price was 72¢ per pound from Peto-Hollar. The 1997 price is $4.80. A=1/4oz, 75¢, ~73 seeds, B=1/2oz, $1.25, C=1oz, $2.25, D=4oz, $3.90, E=1lb, $14.00; 5lb @$13.00.

1622 Bush Buttercup Emerald strain (80 days) Fruits generally a lighter green than Burgess Buttercup, not as uniform or good quality but ready 2 weeks earlier. Its mostly bush habit saves space. A=1/4oz, 75¢, ~35 seeds, B=1/2oz, $1.25, C=1oz, $2.25, D=4oz, $3.90, E=1lb, $14.00.

1628 Burgess Buttercup (95 days) Sweet deep-orange flesh makes it New England's favorite winter squash. 4 lb. fruits have acorn-shaped button on the blossom end and flattened shoulders. Stem is well dried when ripe. The original buttercup strain was developed in North Dakota in 1925. A=1/4oz, 75¢, ~31 seeds, B=1/2oz, $1.25, C=1oz, $2.25, D=4oz, $3.90, E=1lb, $14.00; 5lb @$13.50.

1646 Waltham Butternut (105 days) Elegant 9" tan fruits weighing 4-5 lb. Orange dry flesh has a sweet nutty flavor. Excellent keeper. 1970 AAS. *Caution: often fails to ripen in northernmost areas*. A=1/4oz, 75¢, ~72 seeds, B=1/2oz, $1.25, C=1oz, $2.25, D=4oz, $3.90, E=1lb, $14.00; 5lb @$13.00.

1654 Blue Hubbard New England strain (100 days) Bright yellow-orange dry sweet flesh. Each squash will feed a large family because fruits average 15-20 lb., sometimes exceeding 30 lb. Vines crawl all over the garden. Traditional New England favorite. I often stuff one for Thanksgiving. Prized also for its large, white, sweet seeds delicious roasted. The original Green Hubbard came to North America in 1798; this strain dates from 1909. A=1/4oz, 75¢, ~29 seeds, B=1/2oz, $1.25, C=1oz, $2.25, D=4oz, $4.50, E=1lb, $18.00.

1660 Sweet Meat (95 days) Westerners have pretty much had this 12-15 lb. slate-grey squash all to themselves, but it is becoming better known in this part of the country. Its dry sweet nutty thick orange flesh is said to gain flavor in storage. Developed in Oregon; now it's coming East. We've found a cheaper source with the same good quality so have reduced the price. A=1/4oz, 75¢, ~20 seeds, B=1/2oz, $1.25, C=1oz, $2.25, D=4oz, $3.90, E=1lb, $14.00.

1666 Spaghetti (88 days) A novelty item which caught on and now has devoted followers. Attraction is the spaghetti-like strings in the flesh. Flavor is rather bland. Buff skin turns pale yellow at maturity. A=1/4oz, 75¢, ~46 seeds, B=1/2oz, $1.25, C=1oz, $2.25, D=4oz, $3.90, E=1lb, $14.00.

PUMPKINS

Pumpkins are native to N. America and their seeds have been found in Mexico in burial grounds going back 5-7,000 years. The Perfect Pumpkin by Gail Damerow (#6645 in the book section) may be the best book ever written on pumpkins. See also #1901-1999.

1674 Baby Pam (99 days) Agway pie pumpkin has deep orange color and excellent uniformity. Best of all, it vine-ripens 80-90% of its fruits even in a bad year. Fruits average 3-5 lb., slightly smaller and earlier ripening than New England Pie with the same excellent quality. A=1/4oz, 75¢, ~68 seeds, B=1/2oz, $1.25, C=1oz, $2.25, D=4oz, $3.90, E=1lb, $14.00; 5lb @$12.00.

1682 New England Pie (102 days) The standard small sugar pumpkin, ideal for pies. Has been a favorite since around 1860. Fruits average 5 lb. Most vine-ripen in a good year, about half in a so-so year. A=1/4oz, 75¢, ~70 seeds, B=1/2oz, $1.25, C=1oz, $2.25, D=4oz, $3.90, E=1lb, $12.50; 5lb @$11.00.

1688 Young's Beauty (105 days) Unimpressed by Autumn Gold's "precocious yellow" gene? Don't care for its tendency to produce irregularly shaped fruit? Prefer a classic mid-sized open-pollinated pumpkin that usually ripens perfect brilliant deep orange globes? Try Young's Beauty. Expect good production of uniform hard-skinned thick fleshed 10-12 pounders which make good pies. Even though Hollar has discontinued seed production, we'd like to keep this beautiful pumpkin in commerce. In fact, we're overstocked so we have reduced our price. *Caution: May not ripen in northernmost areas*. A=1/4oz, 75¢, ~50 seeds, B=1/2oz, $1.25, C=1oz, $2.25, D=4oz, $3.90, E=1lb, $14.00; 5lb @$13.00.

1694 Connecticut Field (115 days) Big pumpkin for Jack O'Lanterns gets 15-25 lb., sometimes more. Heirloom grown by Native Americans and adopted by colonists before 1700. Hirschy sold for 4¢ per packet in 1890. *Ripens for us in good years, but often we must pick green and sun cure*. A=1/4oz, 75¢, ~42 seeds, B=1/2oz, $1.25, C=1oz, $2.25, D=4oz, $3.90, E=1lb, $12.50; 5lb @$11.00.

1698 Big Max (120 days) Your kids can have fun growing this giant squash. They will need help moving it, though, because it typically weighs 50-100 lb. and measures up to 70" in circumference! It makes a great Jack O'Lantern. Or, if you don't carve it, you can use it as a temporary chair! A=1/4oz, 75¢, ~24 seeds, B=1/2oz, $1.25, C=1oz, $2.25, D=4oz, $3.90, E=1lb, $14.00; 5lb @$13.50.

GAMBOLING GOURDS

We are pleased to introduce a new line of superior gourd varieties, grown in Hungary by Berkop and field-tested in Roberta Bunker's trials at Super Chilly Farm in Palermo, Maine. We've combined them with our former listings into this new section. Gourds come in two major categories (Luffa is a third). The small ones are *Cucurbita pepo* var. *ovifera* (same species as true pumpkins), also known as ornamental gourds for their variety of shapes, colors and surfaces. These vigorous viners will usually mature in our climate if direct-seeded. The larger ones are *Lagenaria siceraria* or hardshell gourds, named from the Greek *lagenos*, a flask, and *sicera*, an intoxicating drink. Lagenaria, though lacking the color range of their smaller cousins, fascinate with their magical shapes. Because of their long season they must be started indoors in our climate. To improve germination sandpaper or clip off the radicle end and soak the seed. They resent transplanting and will grow slowly for a few weeks. Once they take off—wow! These rampant crawlers are noted for their large foliage, more velvety in texture than that of other cucurbits, and their large white almost luminous night-blooming flowers. Unless trellised they will take up huge amounts of garden space. They are heavy feeders. The Nov/Dec 1997 issue of *Organic Gardening* has a good article with tips on growing Lagenaria in short-season areas. Or see The Complete Book of Gourd Craft by Ginger Summit and Jim Widess, #6518 in our book section. See also #6832 for Cucuzzi.

1712 Small Ornamental Mix (95 days) 8 kinds of early maturing types, with small spoon, bicolored pear, and small orange most prevalent. A=1/8oz, 75¢, ~72 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00.

1738 Small Warted Mix (95 days) Pear-shaped, scalloped and round warted gourds in a variety of colors and markings, including greens, white-grey combos, and yellow-green combos. Baseball sized. A=1/8oz, 75¢, ~57 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00.

Liberty Hyde Bailey on Gourds

"They are so shapely and so colorful, so strange in their markings, so endlessly unlike each other, so durable in winter months, so apparently unrelated to the vines that bear them, and yet so simple to grow, that they hold the interest tenaciously." from The Garden of Gourds

1752 Shenot Crown of Thorns Mix (95 days) These small gourds have pointed ribs that look like teeth. Sometimes called Ten Commandments because the finger-like projections always number ten. Come in a mix of colors and markings. Often called the Ghost Gourd because of its coloring and shape. Kids love to paint faces on them for decoration. A=1/8oz, 75¢, ~71 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00.

1762 Luffa (110 days) Also known as the dishrag gourd, dried and used for making bath sponges. May be more closely related to the cucumber than to the hardshell Lagenaria. *Caution: Luffa requires a long season. Start indoors and culture like melons*. We recommend trellising if you want your squashes to remain straight. A=1/8oz, 75¢, ~36 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00. 280 seeds/oz.

1764 Chinese Bottle (120 days) These big gleaming green gourds provided the most sublime moment of our 1997 trials. They just took my breath away at first sight with their productivity and graceful beauty. At our display at Common Ground Fair we were inundated with requests for seed. Never mind seed, many people just wanted to take the whole display home! 1' high fruits boast bottom bowl 8-9" in diameter with a stout neck (shorter than the regular bottle gourd) and small upper swelling. Very prolific fruit set; each plant *matures* 8 fruit on average, almost all of consistent good shape. NEW! A=1/8oz, 75¢, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00.

1766 Large Bottle (120 days) Beware, these vines are rampant crawlers. According to Mass. market grower Eva Sommaripa, this variety makes a better birdhouse than the birdhouse gourd. Eva suggests cutting a hole about the size of a quarter with a paring knife. Take out at least some of the innards. Wrap a wire for hanging around the indented waist, fasten a loop of non-rusting wire or nylon cord around a branch, and the wrens (or other species if you're too far north for wrens) will come. Don't hang gourds too close together, as these birds are territorial. Wrens usually nest twice a season, once in May and once in July, so you have two chances. If you take the gourd inside for the winter, it will probably last a second season. A=1/8oz, 75¢, ~48 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00.

1772 Corsican Canteen (125 days) Sets 3-6 fruits per plant, shaped like an old-fashioned canteen with height of 3 1/2" and a 7" diameter, some larger. Will make lovely lidded bowls. Originally from Native Americans in New Mexico. NEW! A=1/8oz, 75¢, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00.

1778 Siphon (125 days) With their small 5" bulged bottoms and long elegantly curved necks, these looked like swans. The neck curls naturally if not grown on a trellis and can grow to an astounding 5' long. Grow around a broom handle to mould neck into a spiral. NEW! A=1/8oz, 75¢, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00.

1784 Maranka (130 days) Also known as Dinosaur Gourd. Squash grower Hollar calls them "one of the oddest of the Lagenaria." Maranka makes hard-shelled dark green 10-14" long shiny fruits with knobby protrusions or ridges. Graceful neck curves and tapers at the stem end, though will grow straight if supported. *Caution: Requires a longer season than most other Lagenaria, although I have seen beautiful specimens grown in Maine*. NEW! A=1/8oz, 75¢, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00.

1790 Bushel (135 days) Shaped like a large bowl with a pot lid on it. Can grow enormous given sufficient heat, but in Maine will probably max out at 18" across. *Caution: requires a long season to mature*. To improve your chances limit each vine to one fruit. Prune to halt vine growth after it sets its first fruit. NEW! A=1/8oz, 75¢, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00.

WINTER SQUASH *Cucurbita inflata**

1820 Sweet Mama (88 days) F-1 hybrid. If you like buttercup squash you should try Sweet Mama, a grey-green drum-shaped buttercup type with rounded shoulders and without the cup. Significantly earlier than Burgess with outstanding sweet flavor. My favorite large winter squash; Mama gains more fans each season. 1979 All-America winner. A=1/8oz, $1.20, ~22 seeds, B=1/4oz, $2.00, C=1/2oz, $3.80. 190 seeds/oz. *Not available in larger sizes*.

1832 Pasta Spaghetti (90 days) F-1 hybrid. Although she's not a real squash fan, Nikos says spaghetti squash is one of the most maligned vegetables. Pasta could change that. Its rich yellow flesh has a flavor that stands on its own, not just as the underpinning for traditional spaghetti toppings. Medium-vined plants set 8" cream-colored 2-2 1/2 lb. fruits which ripen to a light yellow. A=1/8oz, 75¢, ~23 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00. 190 seeds/oz.

1842 Delicata (100 days) Also known as Sweet Potato squash. Dates back to 1894. Not only are the ivory-colored fruits with dark green stripes lovely, but also the flavor is unsurpassed. Fruits are small, weigh 1-2 lb. and are excellent keepers. We slice them and bake them for a sweet treat. We go through a lot of them each season! We offer a select strain with oval fruits that has proven superior in trials. A=1/8oz, 75¢, ~60 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00; 1lb @$34.00. 170 seeds/oz.

1850 Sweet Dumpling (100 days) Sometimes we underrate our selections. We always offered Sweet Dumpling because its 1-1 1/2 lb. ivory-colored fruits with green stripes, shaped somewhat like miniature pumpkins, look so stunning that they sell themselves on the stand. Recently Nikos and I taste-tested Dumpling alongside newcomer Heart of Gold, a near look-alike. Heart was good, but Dumpling was better. Although underripe Dumpling fruits are starchy and insipid, fully ripe ones achieve a richness that will send you back for more of their sweet dry orange flesh. A=1/8oz, 75¢, ~22 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00. 440 seeds/oz.

1866 Baby Blue Hubbard (95 days) A scaled-down version of Blue Hubbard, Baby Blue's vines are much more compact and its fruits much smaller (about 4-5 lbs.) than its counterpart, without sacrificing much of the quality. A=1/8oz, 75¢, ~40 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00.

1874 Red Kuri (92 days) Also called Uchiki Kuri. All agree the spectacular red-orange fruits are among the most attractive squashes. But comments on their flavor have ranged from "the best winter squash" to "glorified zucchini, flavor like water." Liking the dry flesh of this Japanese squash, we think the truth lies somewhere in between. Very popular at roadside stands. A=1/8oz, 75¢, ~13 seeds, B=1/4oz, $1.25, C=1/2oz, $2.50, D=1oz, $5.00, E=4oz, $17.50.

1878 Honey Delight (95 days) F-1 hybrid. Squash lovers divide into two main camps: supporters of sweet moist flesh and devotees of dry nutty meats. Honey Delight is to dry squash what Buttercup is to moist. Roberta has been clamoring for us to add her favorite dry Japanese Kubocha type for several years. And our other tasters have confirmed its superiority over others of the genre such as Delica, Nutty Delica and Home Delite. We found its flesh not only dry, but also as sweet and flavorful as its name implies. Flattened round 5-6 lb. dark green fruits with a silvery mottled overlay are good keepers. NEW! A=1/8oz, $1.20 B=1/4oz, $2.00, C=1/2oz, $3.80, D=1oz, $7.50, E=4oz, $28.00.

1892 Green Hokkaido (98 days) These slate-green fruits with thick yellow flesh are preferred by those who like their squash very dry but not particularly sweet. Ribbed rounded fruits are slightly smaller than buttercups. Yields are sparing. Originally from New England, found fans in Japan and now returns to us. Seed organically grown. A=1/8oz, 75¢, ~17 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90. 130 seeds/oz. *Not available in larger sizes*.

PUMPKINS

1922 Jack Be Little (95 days) Tiny ornamental pumpkins weigh only about a half pound. They're great for decorations and a big hit with kids. Also good to eat, said to be excellent stuffed. Flattened, heavily ribbed with vigorous stems. A=1/8oz, 75¢, ~59 seeds, B=1/4oz, $1.25, C=1/2oz, $2.50, D=1oz, $5.00, E=4oz, $17.50; 1lb @$56.00.

1936 Autumn Gold (98 days) F-1 hybrid. Even northernmost growers can vine-ripen medium-sized pumpkins with 1987 AAS Autumn Gold. Commercial growers love its "precocious yellow" gene which ensures no green pumpkins at harvest. Instead, immature fruits are yellow, ripening to a deep orange, ribbed with good handles, 10-15 lb. average. A=1/8oz, 75¢, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00; 1lb @$55.00.

1952 Lumina (100 days) A "ghostly" white pumpkin that kids will love. Excellent for both carving and painting, the fruit are 8-10" high and average 12 lbs, though size varies with growing conditions. As long as it is kept away from frost, Lumina stores well, so a face painted on its smooth surface will last for weeks instead of days. Under stress, the fruit may develop blue patches. We thought Lumina would be more of a hit among home gardeners, instead it has developed a following among commercial growers who like its eye appeal on markets and stands. A=1/8oz, 75¢, ~13 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00; 1lb @$40.00.

1968 Rouge Vif d'Étampes (105 days) Also known as Cinderella. This spectacular French heirloom turns the pumpkin patch into a glowing blaze with its deeply ridged burnt-orange to red fruits. Pumpkins are flat, quite variable in size, ranging from about 7 lb. to upwards of 30 lb. and make great decorative Jack O'Lanterns. Kids are really intrigued by their color. Strictly speaking, this is a squash, not a pumpkin, and the flesh is not as deep orange or as flavorful as that of the pie pumpkins. Originated in France in the early 1800s and was introduced to the US by Burpee in 1883. A=1/8oz, 75¢, ~13 seeds, B=1/4oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $14.00; 1lb @$45.00.

1984 Lady Godiva (110 days) Crop failure. *We regret unavailable in 1998*. We are looking for a seed grower for 1998.

1992 Howden (115 days) For years Howden has set the standard by which large round Jack O'Lanterns are measured. A couple of years ago we finally found a quality seed source. Howden is more symmetrical than Connecticut Field (far less likely to set lopsided fruit), with hard ridged skin and thick flesh. Fruits typically weigh 20-35 lb. Our melon trialers Jill and Peter de Bethune grew some gorgeous specimens this past season. Tolerant to black rot. A=1/8oz, 75¢, B=1/4oz, $1.25, C=1/2oz, $1.80, D=1oz, $2.50, E=4oz, $6.00; 1lb @$18.00.

**Cucurbita frugalis* and *C. inflata* are fictitious inventions of our imaginative copywriter and refer to the prices, not sizes or species of the squashes. For the seed-saver, the real botanical names are:

Cucurbita maxima: Buttercup, Blue Hubbard, Sweet Meat, Big Max, Red Kuri, Green Hokkaido, Rouge Vif d'Étampes ("pumpkins" with round corky stems).

C. moschata: Butternut.

C. pepo: Acorn, Spaghetti, Delicata, Sweet Dumpling, all summer squashes, true pumpkins (hard 5-sided ribbed stems), small ornamental gourds.

Lagenaria siceraria: Large gourds: Chinese Bottle, Large Bottle, Corsican Canteen, Siphon, Maranka, Bushel.

Luffa aegyptiaca: Luffa.

CARROTS *Daucus carota*

1/8 oz packet sows 35 ft; 1 oz 280 ft. Very hardy. Early carrots can be sown by late April. Can take up to 3 weeks to germinate; keep rows from drying out for faster emergence. Sow carrots for winter storage in mid-late June. Thinning is critical: At 3" high thin to 1/2" apart, at 6" thin again to 1" apart. Fresh carrots are among the ten foods with the greatest increase in per capita consumption from 1978-1988. We now have separate spring and fall carrot plots. We've discovered that we need to select separate varieties suitable for each season as most have a particular time when their flavor is best. Carrots are rich in beta-carotene, an antioxidant which is better obtained from food than pills.

2008 Thumbelina (52 days) This 1992 All-America winner from Petoseed was the best tasting and most uniform of the Parisian types in our trial. Parisian carrots are suitable for even the heaviest clay soils because they make round balls 1 1/2" in diameter. They mature very early and are best harvested when they are young and tender. They have a creamy texture when cooked, which is the best way to eat them. A=1/8oz, 80¢, B=1/2oz, $2.10, C=1oz, $4.20, D=4oz, $15.00, E=1lb, $50.00.

2016 Kinko 6 inch (55 days) This Chantenay type is a good early season choice. Conical, stump-rooted carrots of deep color and sweet flavor. Good cold soil emergence. Staffer George Stewart's favorite carrot. Field resistant to Alternaria. A=1/8oz, 80¢, B=1/2oz, $2.10, C=1oz, $3.50, D=4oz, $13.50, E=1lb, $44.00.

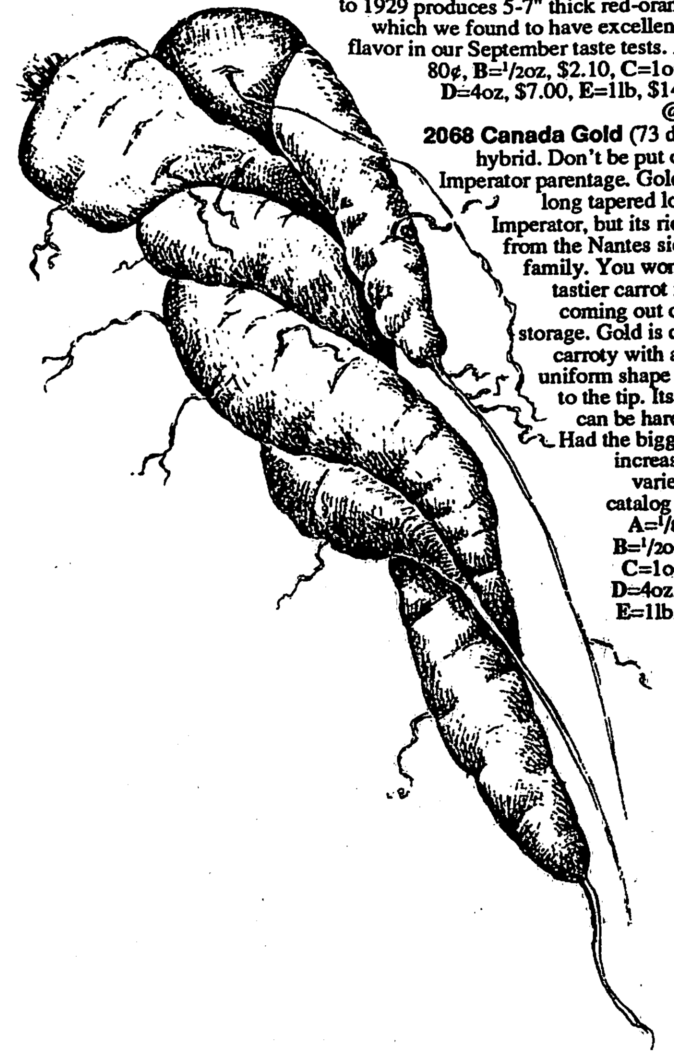
2022 Minicor (55 days) Another excellent choice for the first baby carrots of summer. So named for its very small cores. Extremely slender roots 6-7" long, of exceptionally sweet flavor. Amsterdam/baby Nantes type. A=1/8oz, 80¢, B=1/2oz, $2.10, C=1oz, $3.00, D=4oz, $8.00, E=1lb, $27.00.

2042 Scarlet Nantes (68 days) Old-time favorite Nantes variety with bright orange roots averaging 6-7". A=1/8oz, 80¢, B=1/2oz, $2.10, C=1oz, $3.00, D=4oz, $7.00, E=1lb, $14.00; 5lb @$10.00.

2050 Nantes Fancy (68 days) A classy open-pollinated Nantes. Roots 7" long with unusually good color, flavor. Very uniform. Excellent keeper. Has been our most popular carrot for years. A=1/8oz, 80¢, B=1/2oz, $2.10, C=1oz, $3.50, D=4oz, $13.50, E=1lb, $27.00.

2058 Red Cored Chantenay (70 days) This old heirloom variety developed in France prior to 1929 produces 5-7" thick red-orange roots which we found to have excellent carroty flavor in our September taste tests. A=1/8oz, 80¢, B=1/2oz, $2.10, C=1oz, $3.50, D=4oz, $7.00, E=1lb, $14.00; 5lb @$10.00.

2068 Canada Gold (73 days) F-1 hybrid. Don't be put off by its Imperator parentage. Gold gets its long tapered look from Imperator, but its rich flavor from the Nantes side of the family. You won't find a tastier carrot in fall or coming out of winter storage. Gold is crisp and carroty with a slender uniform shape that fills to the tip. Its 9" roots can be hard to pull. Had the biggest sales increase of any variety in the catalog in 1996. A=1/8oz, 80¢, B=1/2oz, $2.10, C=1oz, $3.50, D=4oz, $13.50, E=1lb, $40.00.



2076 Danvers 126 (75 days) This is a refinement of the Danvers Half-Long originated by market gardeners in Massachusetts in 1871. Danvers 126 is a tasty fall and storage carrot. Orange red roots 7-7 1/2" long, 2-2 1/2" across taper to a blunt end. Salzer's offered an ounce of seed for a dime and a pound for a dollar in 1927. A=1/8oz, 80¢, B=1/2oz, $2.10, C=1oz, $3.50, D=4oz, $7.00, E=1lb, $14.00; 5lb @$10.00.

2086-2098 All F-1 hybrids. 1 gram packet sows 10 ft.

2086 Mokum (48 days) Although we once dropped Mokum, we've since realized that its earliness, slenderness, and sweetness more than offset its flaws. Taste is what Mokum is all about. It won our summer taste tests in 1991, 1993 and 1994. Amazingly, it also came out on top in our fall 1993 test. Mokum is a blunt Amsterdam type which sizes extremely quickly but with short weak tops. Because roots will push out of the ground and develop green shoulders, it should be harvested young. Although Estelle is a more versatile full-season carrot, I make succession plantings of Mokum because it tastes so good as a young carrot. Always the first to disappear from our spring patch. A=1g, 80¢, B=3g, $2.10, C=6g, $3.50, D=24g, $13.50. *Not available in larger sizes.*

2092 Estelle (56 days) Estelle may be unsurpassed as a full-season home garden carrot. It is among the earliest to size in the spring. It won our July, 1989, taste test and still retained enough flavor to come in 2nd in September. Its good interior color and sweet Nantes flavor have won raves. It is not as tasty in dry summers so we recommend watering during drought. A=1g, 80¢, B=3g, $2.10, C=6g, $3.50, D=24g, $13.50, E=120g, $27.00; 1lb @$55.00.

2096 Nelson (56 days) Replaced Clarion which was discontinued by the grower. Though a bit shorter than Clarion and not quite as crisp, this handsome Nantes is even more sweet and carroty. Smooth and uniform, 6-7", with deep orange color. Strong tops make it suitable for summer bunching. Widely grown in Europe; the seed comes from Bejo in Holland. A=1g, 80¢, B=3g, $2.10, C=6g, $3.50, D=24g, $13.50. *Not available in larger sizes.*

2098 Caroline (80 days) Winner of our 1996 fall carrot taste test, Caroline combines meaty Kuroda stock with sweet Chantenay. Sweet, but not crispy for eating out of hand. As good as it is raw, you've got to cook it to appreciate its full range of smooth-textured succulent creamy sweet flavor. These blocky 7-8" roots with deep orange interior color should make superb keepers. Our thanks to the customers who alerted us to this superior variety: We appreciate your suggestions! A=1g, 80¢, B=3g, $2.10, C=6g, $3.50, D=24g, $13.50. *Not available in larger sizes.*

OTHER ROOTS

BEETS *Beta vulgaris*

1/8 oz packet sows 20 ft, 1 oz about 180 ft. Hardy. Can be sown almost as soon as ground can be worked. Thin for use as greens. Lutz variety must be thinned to 4" apart, others require less rigorous thinning. Beets and beet greens are great sources of potassium which helps keep blood pressure down and reduces risk of strokes.

2108 Early Wonder Tall Top (48 days) Originated in 1911. Quick emergence in cold soil and attractive purple tops make this the one to grow for early beet greens and bunching beets. In 1997, we sold 88 one-pounders to market growers and over 1,470 A and B size packets to home gardeners. A=1/8oz, 50¢, ~270 seeds, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $2.60, E=1lb, $4.80; 5lb @$4.40.

2120 Red Ace (50 days) F-1 hybrid. Sweet early season beets. Market growers appreciate its uniformity and perfect shape. Very similar to Early Wonder but more refined. Purple tops. Tolerant to CLS. A=1/8oz, 50¢, ~140 seeds, B=1/2oz, $1.25, C=1oz, $2.40, D=4oz, $7.00; E=1lb, $25.00.

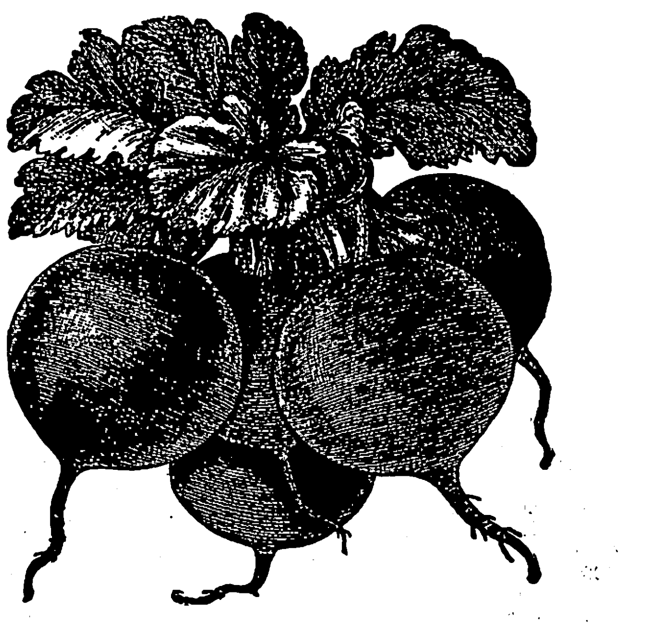
2136 Chioggia (55 days) Staffer Bernice Nadler's favorite because "in addition to having good sweet beet flavor, they are beautiful when sliced open." This heirloom Italian home garden type attracts attention in the kitchen with its alternating interior rings of pink and white. Noteworthy also for its light red exterior color, green tops and exceptional sweetness. Almost as popular as Early Wonder. A=1/8oz, 50¢, ~350 seeds, B=1/2oz, $1.80, C=1oz, $3.50, D=4oz, $13.50. *Not available in larger sizes.*

2146 Burpee's Golden (55 days) Gains in popularity each year and now a market specialty. Roots are golden instead of red, very sweet, and do not bleed like red beets. The original golden beet came from Europe and predates 1828. A=1/8oz, 50¢, ~320 seeds, B=1/2oz, $1.80, C=1oz, $3.50, D=4oz, $13.50. *Not available in larger sizes.*

2156 Formanova (56 days) Also known as Forono and Cylindra. Cylindrical beet grows 6" long. A good pickling or processing beet. Heirloom from the 1880s. A=1/8oz, 50¢, ~295 seeds, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $5.00, E=1lb, $12.50.

2170 Lutz Green Leaf (60 days) Also known as Winter Keeper, the best beet to grow for winter storage. Fruits remain sweet even when large. Tops are glossy green without any purple. For good-sized roots thin to 4" apart. For a special sweet treat, try baking big ones for about an hour. Heirloom variety from Europe. A=1/8oz, 50¢, ~195 seeds, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $4.00, E=1lb, $12.00.

2182 Detroit Dark Red Medium Top (60 days) Standard late variety for home gardeners and canners. Globular smooth uniform roots with tender ox-blood red flesh. Variety dates back to 1892. A=1/8oz, 50¢, ~295 seeds, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $2.60, E=1lb, $4.80; 5lb @$4.60.



> I do remember him at Clement's Inn like a man made after supper of a cheese-paring: when a' was naked he was for all the world like a forked radish, with a head fantastically carved upon it with a knife.
> *Henry the Fourth, Pt.* 2 III, ii, 333

RADISHES *Raphanus sativus*

1/8 oz packet sows 15 ft, 1 oz 100 ft. Hardy. Can be sown early. Summer radishes easy to grow, quick to ripen and go by; make succession plantings. Daikon and winter radishes take longer to maturity, hold longer, require only 1 planting and need to be thinned to 3-4" apart.

2214 Cherry Belle (25 days) A good smooth red-skinned bunching radish making uniform balls 3/4" across with firm white flesh. 1949 AAS. A=1/8oz, 50¢, ~700 seeds, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $2.60, E=1lb, $4.80.

2224 Easter Egg (25 days) Kids love this fascinating radish which comes in shades of pink, purple, red, violet and white. Good even large. Our most popular radish. A=1/8oz, 50¢, ~320 seeds, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $4.00, E=1lb, $12.00.

2234 Champion (25 days) Smooth scarlet roots with firm mild flesh grow quickly to edible size. 1957 AAS. A=1/8oz, 50¢, ~320 seeds, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $2.60, E=1lb, $4.80.

2240 Hailstone (25 days) A crisp round juicy white radish, not very hot. 1" in diameter. Holds well. NEW! A=1/8oz, 50¢, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $2.60, E=1lb, $4.80.

2248 French Breakfast (26 days) Medium-length scarlet root with a white tip. Old favorite from Europe in 1879. A=1/8oz, 50¢, ~500 seeds, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $2.60, E=1lb, $4.80.

2264 White Icicle (30 days) Also known as Lady Finger, heirloom is at least 100 years old. Firm tender all-white roots for the home garden. A=1/8oz, 50¢, ~440 seeds, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $2.60, E=1lb, $4.80.

2268 Misato Rose (60 days) During February pickup last season, market grower Alan LePage snapped most of us out of our winter doldrums by feeding us Misato Rose. A big white radish with green shoulders, Misato doesn't look like much on the outside, but shows its beauty when sliced. Cross-sections have a rosy red center that radiates to pink then to white. Worthwhile for looks alone; taste is its best feature. Plenty of spiciness with a rich sweet vegetable undertone and no harsh sharpness. Will grow as large as a big beet if given sufficient space. For autumn crops, good keeper. NEW! A=1/8oz, $1.00, B=1/2oz, $3.20, C=1oz, $5.00, D=4oz, $16.00, E=1lb, $60.00.

2270 Round Black Spanish (65 days) The lack of a winter keeper has been a major deficiency of our radish selection. What better way to remedy it than with venerable Black Spanish, an heirloom some trace back to the sixteenth-century conquistadores. Turnip-shaped 4" roots with corklike black exteriors have pungent white flesh which loses some heat when boiled or stir-fried. Can be stored like carrots and beets in slightly moistened sand in the root cellar. NEW! A=1/8oz, 50¢, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $2.60, E=1lb, $4.80.

2282 Omny Daikon (65 days) F-1 hybrid. *Daikon* means "big root" in Japanese. According to Takii, more acreage is planted to daikon than any other vegetable crop in Japan. Omny is a refined daikon for market growers. Roots are fatter, shorter and have a classier appearance than Tokinashi. They grow vigorously in cool soil and are very slow to bolt. Black rot, soft rot and virus resistant. A=1 1/2g, 50¢, ~120 seeds, B=1/2oz, $4.50, C=1oz, $8.00. *Not available in larger sizes.*

PARSNIPS *Pastinaca sativa*

1/8 oz packet sows 25 ft, 1 oz about 200 ft. One of the best for grating and stuffing into eggrolls, strudels and veggie pies. Harvest some after frost for late fall delights. The remainder will taste even sweeter after overwintering for a real spring treat! Seed is short-lived; if you are planning to use old seed, germ test in paper towels before sowing.

2306 Andover (120 days) If you have good soil tilth you'll appreciate Andover, a refined tapered cylindrical root which will grow up to 14" long. A knockout in our 1996 parsnip trial. Developed by the University of Minnesota. A=1/8oz, 50¢, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $4.50, E=1lb, $16.00.

2310 Harris Model (120 days) Sweet-flavored smooth tapered roots average 10". For better performance, prepare raised beds, especially in heavy soils. Don't believe stories that this strain is running down. It looked great in our 1996 trials. A=1/8oz, 50¢, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $2.60, E=1lb, $4.80.

SCORZONERA *S. hispanica*

2322 Scorzonera (120 days) This long narrow dark-skinned white-fleshed root has an unprepossessing appearance, yet it is prized by gourmet cooks in Europe who call it the oyster plant for its distinctive flavor and use it in place of the potato in *haute cuisine*. Its name derives from the Spanish *corteza negra* or "black bark." Has a firm delightful texture almost like pudding, but is not sweet like many root vegetables. Much of the flavor resides in the dark skin which should not be peeled before cooking. Culture like parsnips, overwintering in the field and pulling as needed. Tastes better after a hard frost. Has only limited storage in root cellars. Seed is short-lived; germ test old seed in paper towels before using. A=1/8oz, 50¢, ~250 seeds, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $5.00. *Not available in larger sizes.*

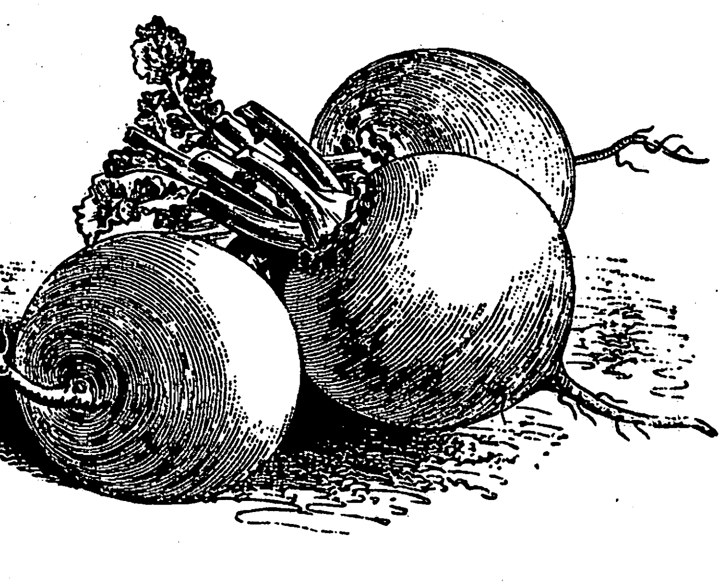
RUTABAGAS & TURNIPS

1/8 oz packet sows almost 40 ft, 1 oz about 400 ft. Hardy members of Crucifer family. Thinning is critical for full-sized roots.

2358 Laurentian Rutabaga (95 days) *B. napus* Popular Canadian variety with deep purple crown and cream yellow base. Uniform 5-6" almost neckless roots suitable for winter storage, larger and sweeter than American Purple Top, which it replaces. Pale yellow flesh has refined texture and taste. NEW! A=1/8oz, 50¢, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $2.60, E=1lb, $4.80.

2378 Purple Top White Globe Turnip (50 days) *B. rapa* Popular variety with purple tops, white bottoms and white flesh. An heirloom from before 1880. A=1/8oz, 50¢, ~1,750 seeds, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $2.60, E=1lb, $4.80.

2392 Gilfeather® Turnip (85 days) *B. n.* Heirloom variety either developed or discovered by John Gilfeather (1865-1944) of Wardsboro, VT, in the late 1800s. Gilfeather, a lanky secretive man, is said to have cut the tops and bottoms off his turnips so that no one else could propagate them. Nevertheless, some seeds escaped to a neighbor who gave them to market growers William and Mary Lou Schmidt, who salvaged them, then commercialized the variety. Gilfeather is sweeter and later to mature than other turnips, and not woody even at softball size. Really more like a rutabaga than a turnip. The white flesh tastes better after frost. Packet sows almost 20'. A=1 1/2g, 50¢, ~750 seeds, B=1/2oz, $4.50, C=1oz, $8.00. *Not available in larger sizes.*



> Alas! I had rather be set quick i' the earth, and bowl'd to death with turnips.
> *The Merry Wives of Windsor* III, v, 89

ALIMENTARY ALLIA *Allium* spp.

1/16 oz packet about 450-600 seeds, 1 oz 7,000-10,000. Start indoors in Feb. or March and transplant out in May. Set leeks 6-12" apart, onions 4-6," scallions 3-4". Harvest onions after tops fall, field cure about 10 days. Onions survive light frosts. Per capita consumption of onions has increased 55% since 1981 to 16.7 lb. According to the National Cancer Institute, increasing consumption of alliums lowers the risk of stomach cancer. Leeks have become a mainstay in our kitchens throughout the fall. Early leeks have tall shanks above ground and should be harvested before severe frosts. Hardier leeks have broader, shorter shanks and will hold till November. Siegfried, our hardiest leek, will withstand our severe winters provided it is hilled and mulched. Leeks brought into the root cellar will survive almost the entire winter if heeled into dirt.

LEEKS *A. ampeloprasum* (porrum group)

2406 King Richard (75 days) King Richard is noted for its elegant long thick delicately flavored stalks. It is ready in late August, will withstand light frosts, but should be harvested before the really cold nights. Using the Ruth Stout permanent mulch method Massachusetts grower Claire DeLoid grew King Richards taller than she! A=1/16oz, 75¢, ~435 seeds, B=1/8oz, $1.25, C=1/2oz, $2.50, D=1oz, $5.00, E=4oz, $19.00; 1lb @$65.00.

> See, see, King Richard doth himself appear,
> as doth the blushing discontented sun...
> *Richard the Second* III, iii, 62

2414 Imperial (85 days) This beautiful Danish leek attracted our attention in September. Its shaft combines impressive stoutness with good length, for a large edible area on each plant. It is rated by our supplier as a medium-early autumn leek. It holds for us until mid-October when the nights get really frosty. A=1/16oz, 75¢, ~500 seeds, B=1/8oz, $1.25, C=1/2oz, $2.50, D=1oz, $5.00, E=4oz, $19.00; 1lb @$50.00.

2426 Siegfried (120 days) Cometh April, the snows recede, give way to mud, the squashes turn to squish, potatoes have eyes not for your stomach, the pleasures of stored root and cole crops pale and you crave something fresh. Here's a truly delectable springtime treat! A leek which often withstands the rigors of winter and awaits your springtime appetite. Siegfried makes most of the growth that matters below ground where it is protected from the cold. You will get about 4 inches of thick stalk. After you peel off the outer layer or two you will most likely find Siegfried looks as good as any fall leek. About 80% in our trial withstood the harsh winter of 93-94. We were not so fortunate after the mild '94-95 winter when alternate freezing and thawing heaved up the roots. We suggest hilling your leeks and mulching after the ground freezes to improve your odds. A=1/16oz, 75¢, ~350 seeds, B=1/8oz, $1.25, C=1/2oz, $2.50, D=1oz, $5.00, E=4oz, $19.00.

> Ay, leeks is good.
> *Henry the Fifth* V, i, 61

SCALLIONS *A. fistulosum*

2432 Red Beard (60 days) A vigorous crispy colorful scallion from Japan. Outer shaft develops bright red color in cool weather. Underneath flesh is white. In our 1993 trial we were disappointed that some scallions did not develop any red color and others got only a thin layer of light red. We suspect the lack of red was due to our late May transplanting date and the warm, dry summer. A=1/16oz, 75¢, ~350 seeds, B=1/8oz, $1.25, C=1/2oz, $2.50, D=1oz, $5.00, E=4oz, $19.00.

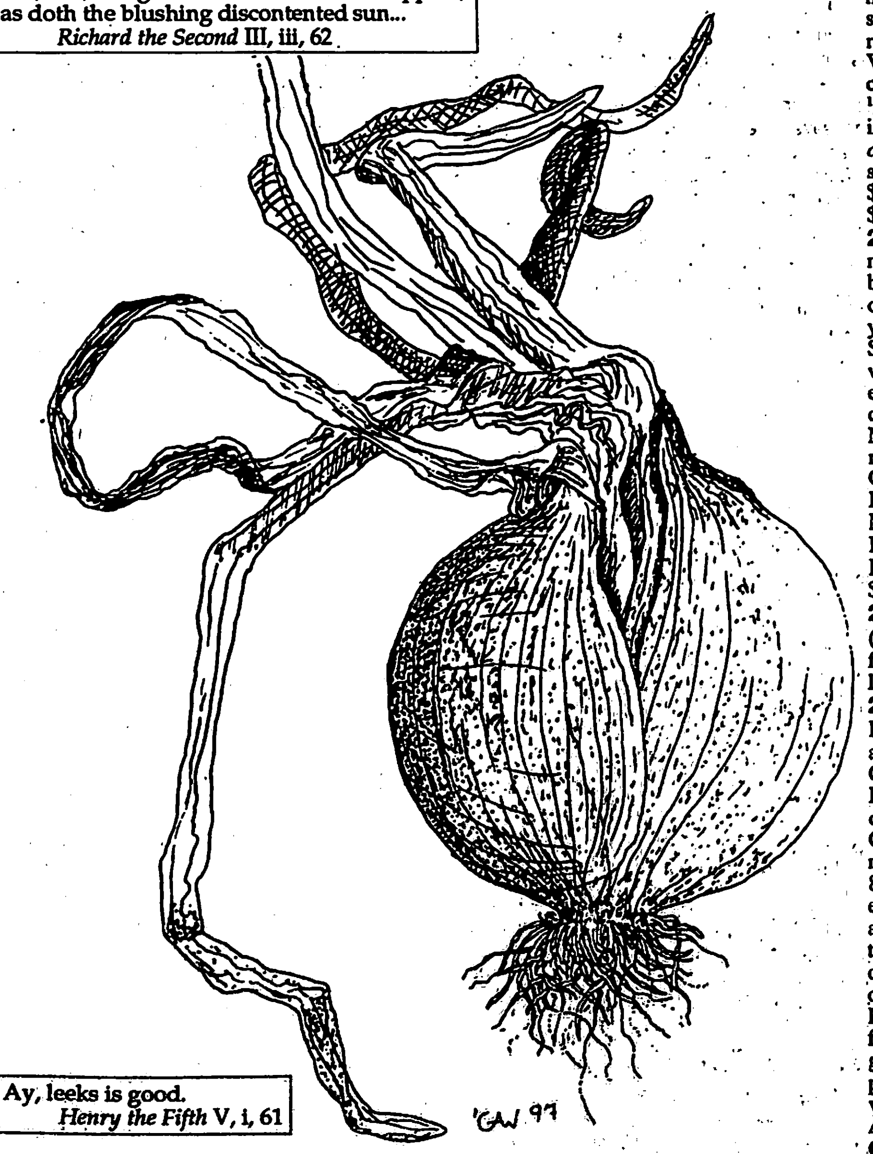
2438 Evergreen Hardy White (65 days) Also known as Nebuka, Hardy variety can be overwintered even in severe climates for a real April treat. Heirloom from Japan originated in the 1880s. A=1/16oz, 75¢, ~575 seeds, B=1/8oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $6.50; 1lb @$20.00.

ONIONS *Allium cepa*

2444 Crystal White Wax (70 days) These 1 1/2" pearly white bulbs ripen around the same time as peas for early summer baby onions or pickles. A=1/16oz, 75¢, B=1/8oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $6.50; 1lb @$20.00.

2450 New York Early (98 days) A superior strain of Early Yellow Globe selected for storage until early spring and maintained by Orange County, NY commercial onion growers. Very firm mild yellow onions may be eaten raw in salads or on sandwiches. They average 2 1/2-3" across, and store longer than Early Yellow Globe which we have discontinued. A=1/16oz, 75¢, B=1/8oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $6.50; 1lb @$20.00.

2464 Redman (101 days) Provides good yields of uniform firm large red onions that store better than Southport Red. A=1/16oz, 75¢, B=1/8oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $12.00; 1lb @$35.00.



2472 Copra (104 days) F-1 hybrid. Hard medium-sized storage onions with blocky round shapes and thin necks. Very popular among commercial growers, who bought 78 1/2-ouncers and 83 one-ouncers in 1997. *The best storage onion.* A=1/16oz, 75¢, ~290 seeds, B=1/8oz, $1.25, C=1/2oz, $4.20, D=1oz, $8.00, E=4oz, $25.00.

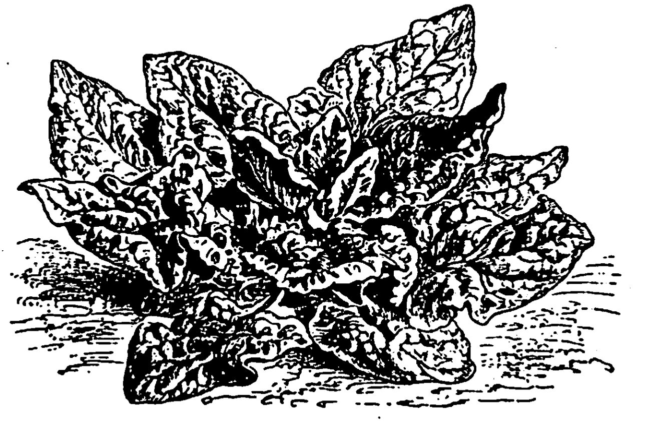
2476 Mars (104 days) There may be no life on planet Mars but there is plenty of life in onion Mars. For three straight years, Donna Dyrek at Loon Song Farm has been impressed with its size, production and earliness. Bigger and more consistently round than Mambo, Mars is uniformly ready Sept. 1 in central Maine. Good storage into April. Purplish-red skin, Replaces Mambo. NEW! A=1/16oz, 75¢, B=1/8oz, $1.50, C=1/2oz, $6.00, D=1oz, $10.00, E=4oz, $40.00.

2478 Southport Red Globe (105 days) We can no longer find a supplier for this heirloom. *Not available in 1998.*

2484 Ailsa Craig (110 days) How much potential energy in a seed? Jason Kafka of Checkerberry Farm in Parkman grew 8,000 lbs. of onions from 1 1/2 oz. of Ailsa Craig seed in 1997. That's a multiplication of better than 80,000 to one! We're not exaggerating when we talk about 1 1/2-3 lb. onions from this variety—Jason grew hundreds in that range. This is the onion to grow to enter in the Exhibition Hall of your county fair. The enormous round globes are sweet, mildly pungent and will store a short while. Heirloom from England. A=1/16oz, 75¢, B=1/8oz, $1.50, C=1/2oz, $6.00, D=1oz, $10.00, E=4oz, $40.00.

2494 Mambo (115 days) F-1 hybrid. *We regret untreated seed not available for 1998.* We hope to have it back in 1999.

2497 Walla Walla Sweet Spanish (125 days) This onion became famous in the Pacific Northwest for its juicy sweet flavor. In the warm climate of Walla Walla, WA, it can be wintered over. In our harsher climate, it must be sown in the spring for fall harvest. Large onions are known for their mildness as soon as they come out of the ground. They will not store. A=1/16oz, 75¢, ~435 seeds, B=1/8oz, $1.25, C=1/2oz, $2.25, D=1oz, $3.90, E=4oz, $6.50; 1lb @$14.00.



SPINACH *Spinacia oleracea*

Packet sows 45 ft, 1 oz plants 150-200 ft. Very hardy. Must be planted as soon as the ground can be worked in the spring to avoid early bolting. For fall crop try late Jul-Aug sowing; to overwinter, sow late Aug-Sept. Heavy nitrogen requirements, but avoid applying high-nitrogen fertilizers shortly before harvest to prevent high nitrate levels in the leaves. Hint: Pick large leaves often for heavier production. Spinach is rich in folic acid which may play an important role in preventing heart disease, strokes and reducing birth defects. Spinach and beet greens are rich in magnesium which may help protect against high blood pressure and diabetes.

2516 Indian Summer (39 days) F-1 hybrid. A high-yielding dark-green spinach with partly crinkled leaves. Seems to require warmer soil than Long Standing Bloomsdale, but is much more bolt-resistant in warm weather. Resistant to DM1 and 2. A=1/4oz, 50¢, ~350 seeds, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $3.20, E=1lb, $7.20, 5lb @$7.00.

2540 Long Standing Bloomsdale (42 days) The standard crinkly leaved spinach. Very good cold soil emergence. Recent hybrids surpass it in production and bolt resistance. David Landreth, founder of the Landreth Seed Company, since 1784 the oldest continuous seed dealership in the US, developed the original Bloomsdale Spinach, forerunner of this type. This strain came from Europe in 1925. Burpee sold it for a dime a packet and 35¢ per ounce in 1955. A=1/4oz, 50¢, ~350 seeds, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $3.20, E=1lb, $4.00, 5lb @$3.80.

2550 Tyee (44 days) F-1 hybrid. Tyee has long been our favorite crinkly leaved spinach. Still the only dependable variety we have found in years like 1997 when spring is abbreviated and the heat comes on fast. Tyee outperforms other savoyed types both in yields and ability to stand without bolting. Upright habit. A=1/4oz, 50¢, ~350 seeds, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $3.20, E=1lb, $8.00, 5lb @$7.60.

2560 Residane (45 days) F-1 hybrid. Smooth-leaved varieties are preferred by chefs and others who cook a lot because they are much easier to clean than savoyed types. Residane's smooth long oval leaves have full spinach flavor, sweet with a little zip. Productive upright plant stands as long as Tyee if it is not stressed by heat and drought. Good for the main crop, also worth a try for overwintering. Has been a top seller every year since Roberta Bunker discovered it in her 1993 trial. Resistant to PS 1,2 and 3. A=1/4oz, 50¢, ~350 seeds, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $3.20, E=1lb, $7.20, 5lb @$6.50.

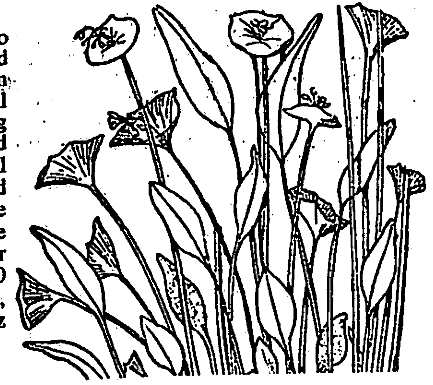
2592 New Zealand Spinach (52 days) Tetragonia tetragonioides. Don't let the common name fool you. This is not a true spinach. Doesn't look like one or taste like one. But it stands through the hot summer when regular spinach bolts, and some find it an acceptable substitute. Will withstand frosts down to the low 20s. Nut-like seeds are customarily slow poor germinators, will be quicker if you soak them before sowing. Be patient and don't give up too soon. Only a few plants are needed to fill in your patch. A=1/4oz, 50¢, ~88 seeds, B=1/2oz, 95¢, C=1oz, $1.50, D=4oz, $3.20, E=1lb, $7.20, 5lb @$7.00.

EXOTIC GREENS

CLAYTONIA *Montia perfoliata*

Direct seed in spring, 24 per ft. Thin to 3" apart. Responds to cut-and-come-again culture and tolerates moderate frosts. For best quality, make at least one succession planting.

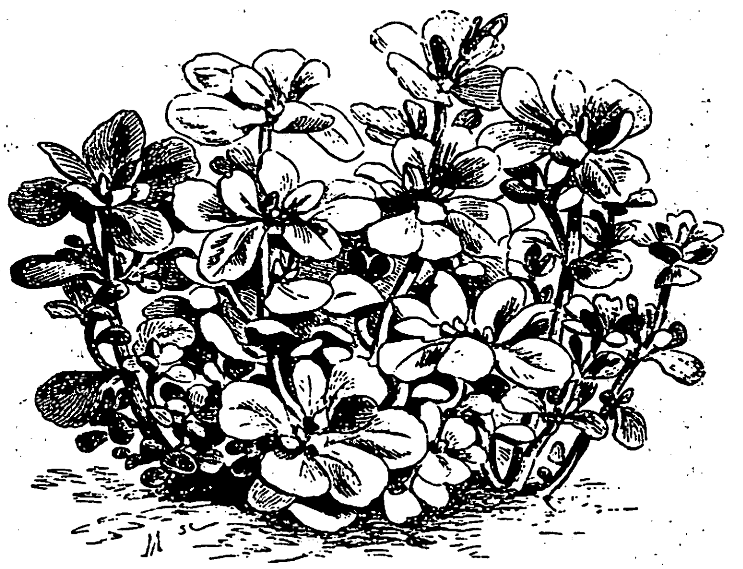
2610 Claytonia (40 days) Also known as Winter Purslane and Miner's Lettuce, it was the green of choice of the '49ers. Until recently, seed for this intriguing salad plant has been expensive and hard to find. Claytonia's small heart-shaped leaves have a mild but succulent taste which we have found increasingly attractive. We now add it regularly to our mesclun. A=1/2g, $1.10, ~800 seeds, B=1g, $2.00, C=2g, $3.90, D=8g, $9.00, E=16g, $15.00; 1oz @$27.00. 45,000 seeds/oz.



PURSLANE *Portulaca oleracea* var. *sativa*

Direct seed in spring, after danger of frost is past. Thin to 5" apart. Can be cut; will regenerate. Doesn't tolerate frost. We recommend a succession planting to maximize tenderness. Purslane leaves have more vitamin C than spinach leaves and are rich in omega-3 fatty acids and antioxidants.

2636 Goldgelber (50 days) Related to the common garden weed, but more erect and not crawly. Goldgelber has a succulent texture with a mildly acerbic flavor which makes it an ideal addition to mesclun. Golden-green leaves patterned like a cross. A=1/2g, $1.10, ~1200 seeds, B=1g, $2.00, C=2g, $3.90, D=8g, $5.00, E=16g, $7.00; 1oz @$12.00. 70,000 seeds/oz.



CHICORIES

2652 Pan di Zucchero Chicory (80 days) *Chicorium intybus* The name means "sugar loaf" in Italian. If you associate chicory with bitterness Pan di Zucchero will surprise you. It stood out from the four dozen others in chicory expert Lucie Arbuthnot's fields. In her kitchen, it was delicious. Its 1' tall large tight light green leaves are shaped like a romaine lettuce crossed with a napa cabbage. High yielding, best as a fall crop. Will store well for three months and survive for four if you wrap it tightly in slightly damp newspaper and keep it in a cold (just above freezing) spot. Lucie compares it to witloof chicory, but without all the extra work. Heirloom. A=1/2g, $1.10, ~500 seeds, B=1g, $2.00, C=2g, $3.90, D=8g, $7.00, E=16g, $12.00; 1oz @$16.00.

2654 Della Catalogna or Radichetta (49 days) *Lactuca sativa* Is it a dandelion, a chicory or a lettuce? We had quite a correspondence before finding out from the Italian supplier that it *is* a lettuce. In our trials it attracted attention with its bluish color and heavy-textured serrated leaves somewhat resembling dandelions, and tasting agreeably bitter, more like escarole than lettuce. Lettuce or not, it should be used like chicory or Italian dandelion. Italians customarily chop the leaves, steam them and sauté them in olive oil. A=1/2g, $1.10, B=1g, $2.00, C=2g, $2.50, D=8g, $4.00, E=16g, $6.00; 1oz @$10.00.

RADICCHIO *Cichorium intybus*

Though these radicchios have not yet been refined to absolute uniformity, and occasional plants still bolt unpredictably, they are not difficult to raise from transplants. If you try direct-seeding, watch out for voracious flea beetles. Culture like lettuce; do not allow to dry out. They are mature when heads form in the center. The outer leaves are very bitter and should not be eaten. The edible centers are an acquired taste, retaining some bitterness, wonderful in salad or braised. Even if you don't like to eat radicchio, consider growing it as an ornamental. Fall crops make the largest heads. Very tolerant of fall frosts. Ours gallantly stood consecutive nights in the low twenties without apparent damage. We worked extensively with radicchio at Bambi Jones' trial and at Shooting Star Farm, selecting two outstanding performers in 1997.

2662 Palla di Fuoco Rossa (65 days) Chioggia-type round-heading open-pollinated radicchio from Italy. Palla di Fuoco impressed us with its deep burgundy heads which matured earlier and with better uniformity than Augusto. Its name means pale red fire. *Fuoco* also signifies passion, or (as a verb) to focus. A radicchio to focus your passion on! A=1/2g, $1.10, ~350 seeds, B=1g, $2.00, C=2g, $3.90, D=8g, $7.00, E=16g, $12.00; 1oz @$18.00. 20,000 seeds/oz.

2684 Radicchio di Treviso (80 days) An open-pollinated radicchio from Italy which is shaped almost like a small romaine lettuce. Turns from green to variegated dark burgundy with lovely white veining as the nights turn cold. As its narrow leaves bunch like a romaine, you can bind them with a ribbon to make a firmer "head." Best for fall crops. A=1/2g, $1.10, ~350 seeds, B=1g, $2.00, C=2g, $3.90, D=8g, $7.00, E=16g, $12.00; 1oz @$20.00. 20,000 seeds/oz.

> My salad days, when I was green in judgment, cold in blood,
> to say as I said then!
> *Antony and Cleopatra* I, v, 73

LETTUCE BEGIN *Lactuca sativa*

1 gram packet sows 25 ft; 2 grams 50 ft; 1 oz 500-700 ft. May be started indoors in March and at regular intervals thereafter, or sowed outdoors as soon as ground can be worked. Most varieties won't germinate at temperatures above 75°. Hardy. All save icebergs tolerate heavy frost. Grow best in cool weather, many kinds suffer bottom rot and tipburn in heat; select summer varieties carefully. Sow every 2 weeks for continuous supply. Lettuce will not head unless thinned frequently & ruthlessly to final distance of 1'. Heavy nitrogen feeders. Lettuces are leaf types except where specified. Early in this century people discovered that lettuce can be eaten raw. Now people are rediscovering cooked lettuce. Try it in soups or wilted over sautéed onions. Our extensive lettuce trial is always a colorful early summer highlight at Shooting Star Farm. U.S. consumption of fresh lettuce is 27.6 lb. per capita per year. **Varieties in this section average 1,750 seeds/pkt.**

2710 Black Seeded Simpson (42 days) The earliest and most popular looseleaf variety. Large loose crumpled juicy light-green leaves. Does not stand heat well; sow early as the ground can be worked. Heirloom variety goes back to 1850. Hirschy offered it for 4¢ per packet in 1890. A=2g, 50¢, B=4g, 95¢, C=14g, $1.50, D=28g, $2.60, E=112g, $4.80; 1lb @$10.00.

2718 Green Ice (45 days) Customers asked us to list Burpee's well-known variety. This shiny crinkly looseleaf with fringed leaf margins is firm and crunchy in salads. Slow to bolt, but gets tough in the centers. We made a special deal; take advantage of our low price this year. A=2g, 50¢, B=4g, 95¢, C=14g, $1.50, D=28g, $2.60, E=112g, $4.80; 1lb @$12.00.

2722 Salad Bowl (46 days) Bright-green notched leaves form compact rosette. Stands hot weather better than Black Seeded Simpson. 1952 All-America winner. A=2g, 50¢, B=4g, 95¢, C=14g, $1.50, D=28g, $2.60, E=112g, $4.80; 1lb @$10.00.

2728 Red Salad Bowl (46 days) Compact rosettes of spectacular bronze-red oakleaves. Has become one of our most popular lettuces. We sold 81.5 pounds of seed in 1997. A=2g, 50¢, B=4g, 95¢, C=14g, $1.50, D=28g, $2.60, E=112g, $4.80; 1lb @$11.00.

2734 Tom Thumb Baby Bibb (46 days) Miniature butterhead type which makes a small tightly bunched head early. Good for garnishes. Outer leaves light-medium green, centers creamy white. Very attractive for early markets. May be the same variety as Loo's Tennis Ball. Originated in England in 1830, dates back to at least 1853 in the states. A=2g, 50¢, B=4g, 95¢, C=14g, $1.50, D=28g, $2.60, E=112g, $4.80; 1lb @$9.00.

2740 Bronze Mignonette Baby Bibb (46 days) This small ruffled bronze-tinged butterhead captivated me in the 1992 trials. Because Mignonette is only slightly larger than Tom Thumb, it is ideal for baby vegetable enthusiasts. A=2g, 50¢, B=4g, 95¢, C=14g, $1.50, D=28g, $2.60, E=112g, $4.80; 1lb @$10.00.

2754 Prizehead (48 days) Crinkly outer leaves tinged with red. Superior flavor. Very popular market type. Bolts in heat. Heirloom offered by Hirschy in 1890 for a nickel a packet. A=2g, 50¢, B=4g, 95¢, C=14g, $1.50, D=28g, $2.60, E=112g, $4.80; 1lb @$9.00.

2764 Red Sails (49 days) Petoseed's 1985 All-America winner has become almost synonymous with red leaf lettuce. Red Sails is delicious, slow to become bitter or to bolt even in heat, and a most attractive large plant with splashes of purplish-red leaves. New Hampshire market grower Rick Estes says "nothing (among reds) comes close to Red Sails for dependability and consistent harvesting for a wholesale market. Heat, cold, drought, wet—it makes no difference. Red Sails comes shining through." Supplanted Buttercrunch as our best-selling lettuce in 1997. A=2g, 50¢, B=4g, 95¢, C=14g, $1.50, D=28g, $2.60, E=112g, $7.00; 1lb @$22.00.

2768 Waldmann's (50 days) Large handsome crinkly leaved heads of bright green lettuce. An attractive green leaf Grand Rapids type for market. Its appearance and texture is superior to that of Green Ice, but it does not stand heat as well and gets bitter toward mid-July. A=2g, 50¢, B=4g, 95¢, C=14g, $1.50, D=28g, $2.60, E=112g, $4.80; 1lb @$10.00.

2772 Buttercrunch Bibb (50 days) A 1963 All-America selection. Dark-green outer leaves with creamy center heart. Slow to bolt. Our best-selling lettuce for fifteen consecutive years from 1982-96 until finally overtaken by Red Sails. A=2g, 50¢, B=4g, 95¢, C=14g, $1.50, D=28g, $2.60, E=112g, $4.80; 1lb @$10.00.

2774 Royal Oakleaf (50 days) The most attractive green oakleaf, recommended for market growers. Darker, larger and fancier than other green oakleaf types. Our supplier calls it the "Rolls Royce of oak leaf lettuces." We agree. We've reduced the price this year because Petoseed offered us a special deal. A=2g, 50¢, B=4g, 95¢, C=14g, $1.50, D=28g, $2.60, E=112g, $4.80; 1lb @12.00.

2778 Monet (53 days) Shortly after arriving in Giverney, the famed French impressionist Claude Monet (1840-1926) had his gardeners replace the hedges, which he found boring, with flower gardens. I wonder how he would have depicted our lettuce trials after I allowed volunteer red amaranth, sweet annie and carnation poppies to intersperse with the lettuces. His namesake in the lettuce patch looks more like a friseé endive than a lettuce, but that's not surprising because Petoseed bred Monet's deeply indented curly green crisp textured leaves to be cut for mesclun. Monet's close cousin Tango, while unknown in painting circles, is better known in the seed trade, but we prefer Monet's darker green color. Although plants grow 7-8", don't let the leaves go unsnipped too long because this Monet will bolt in heat. Offered at a special low price this year. A=2g, 50¢, B=4g, 95¢, C=14g, $1.50, D=28g, $2.60, E=112g, $4.80; 1lb @$12.00.

2780 Batavia Blonde #6 (55 days) This Danish variety is unusually lovely with its fringed blonde leaves. Better yet, it holds a long time, doesn't get bitter, and tastes good. A=2g, 50¢, B=4g, 95¢, C=14g, $1.50, D=28g, $2.60, E=112g, $6.00; 1lb @$18.00.

2786 Kagraner Sommer Bibb (58 days) Makes elegant pale-green heads of exceptional quality. Its real claim to fame is its reluctance to bolt even in midsummer heat. A=2g, 50¢, B=4g, 95¢, C=14g, $1.50, D=28g, $2.60, E=112g, $4.80; 1lb @$14.00.

2788 Esmeralda Bibb (60 days) Fancy butterhead lettuce at its best! The most elegant heart of any butterhead we've grown. Compared to Nancy, which it replaces, Esmeralda is slower-growing, longer-holding, with an even more buttery texture. Makes firm heads with large frames and butts and creamy yummy lime-green hearts. A dependable performer for years in our trials, now finally available at a reasonable price. Tolerant to DM1,2A,2B,3,4 and LMV. NEW! A=2g, 50¢, B=4g, 95¢, C=14g, $1.50, D=28g, $2.60, E=112g, $6.00, 1lb @$22.00.

2791 Winter Density Bibb/Romaine (60 days) Is it a bibb lettuce or a romaine? Doesn't matter, either way it's one of Gene's favorites, as the eating quality of the thick tender dark green leaves is superb. Starts out looking like a bibb. Wrapper leaves fold tightly, form a head like a romaine when mature. Combines the substance of romaine with the tender succulence of bibb. A=2g, 50¢, B=4g, 95¢, C=14g, $1.50, D=28g, $2.60, E=112g, $4.80; 1lb @$10.00.

2796 Parris Island Cos Romaine (68 days) The standard market romaine. Upright heads 8-9" tall self-fold to form compact head. Interior greenish-white. Resistant to tipburn and bolting even in heat. Cos is an island in the Dodecanese region of Greece where this type lettuce may have originated. A=2g, 50¢, B=4g, 95¢, C=14g, $1.50, D=28g, $2.60, E=112g, $4.80; 1lb @$9.00.

2797 Summertime Iceberg (70 days) Summertime is an Oregon State University release with uniform compact dense medium-sized heads of excellent flavor that are without peer in standing heat. Harvest iceberg well into July with Summertime. Resistant to tipburn. A=2g, 50¢, B=4g, 95¢, C=14g, $1.50, D=28g, $2.60, E=112g, $4.80.

2798 Webb's Wonderful (72 days) Comes to us from England via M. Schultz' lettuce collection. Exceptional buttery mild flavor is reminiscent of the butterheads. Instead Webb's remarkable large-veined lightly savoyed dark-green leaves slowly form a very large crisphead. Stands heat well and bolts reluctantly. NEW! A=2g, 50¢, B=4g, 95¢, C=14g, $1.50, D=28g, $2.60, E=112g, $4.80; 1lb @$12.00.

LETTUCE CONTINUE

The varieties in this section average 850 seeds per pkt.

2810 Brunia Oakleaf (46 days) Vilmorin's bronze oakleaf type closely resembles Cocarde. Its rusty and green colors, combined with its perfect form, make it one of the most striking in the lettuce patch. More home gardeners should try this longtime commercial favorite. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $7.50, E=28g, $14.00; 4oz, $55.00.

2816 Cracoviensis (47 days) We've enjoyed a rich correspondence with Seed Savers lettuce curator M. Schultz, who several years back sent us an incredible collection of heirloom lettuces to trial. Of the more than 100 varieties, Cracoviensis proved to be my absolute favorite, unlike any others in size, shape or colors. Cracoviensis is where the red meets the green, making a dazzling twisting rosette with heavy purple accenting, especially towards the center. Plants are fast growing and very large. Although relatively rapid bolters, their tender buttery flavor without bitterness persists even after they bolt. Though it is listed as a specific type of lettuce in The Vegetable Garden by Vilmorin-Andrieux (1885), we have never seen Cracoviensis offered by any other seed company. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $5.50, E=28g, $9.50; 4oz, $30.00.

2824 Simpson Elite (48 days) Despite its name, similar size and light green color, Simpson Elite is a succession variety rather than a replacement for Black Seeded Simpson. Elite doesn't germinate as well in cold soil, or grow as quickly as BSS, but way surpasses the 116-year-old heirloom in its ability to stand heat without bolting. With Elite, you can extend the season by at least 2-3 weeks. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $3.00, E=28g, $5.00; 1lb @$35.00.

2829 Green Deer Tongue (48 days) Also known as Matchless, this venerable heirloom goes all the way back to the 1740s. One of the only two deer tongues you will ever want to see in your garden! Companion to Red Deer Tongue with its characteristic thick green pointed leaves radiating from a compact center. Slow to bolt. Has a rich nutty flavor that doesn't turn bitter. OCIA certified organically grown seed. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $5.50, E=28g, $9.50; 4oz, $25.00.

2830 Red Deer Tongue (48 days) Heirlooms Green and Red Deer Tongue have long been favorites in our trials. At last we have sufficient seed to offer both. Thick-textured pointy leaves radiating from compact centers are Deer Tongue's hallmark. Bright green leaves with red edges are imbued with a rich nutty flavor that you will want to enjoy again and again. Withstands heat fairly well. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $5.50, E=28g, $9.50; 4oz, $30.00.

2834 Blushed Butter Oaks (49 days) Last year Fedco introduced this new class of lettuces developed by Frank Morton in Oregon and grown without chemical fertilizers, pesticides or herbicides. And you responded with rousing orders which overwhelmed our limited seed supply very early. We increased our contracts for 1998 and are ready for the deluge. Best described as a compact oakleaf butterhead, with a delightful combination of pink and green colors and a buttery taste, Blushed Butter Oaks was a hit with everyone who saw it or sampled it at our trial. Has some frost tolerance. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $7.50, E=28g, $14.00; 4oz, $52.00.

2836 Blushed Butter Cos (49 days) Here is a combination butterhead/romaine lettuce with ruffled savoyed leaves dappled in an attractive palette of reds and greens. Best of all, Butter Cos was judged to be #1 for taste out of more than 100 lettuces in our 1996 trial. Remarkably crisp for such a buttery taste. A Fedco introduction. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $7.50, E=28g, $14.00; 4oz, $52.00.

2852 Sierra Batavian (50 days) This red-tinged French Batavian is renowned for its extraordinary seedling vigor, resistance to tipburn and reluctance to bolt even in midsummer heat. Has compact upright form. A favorite among market growers, it especially stands out in late July when others have rotted or bolted. Resists DM, tolerates LMV. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $7.50, E=28g, $14.00; 4oz, $55.00.

2868 Grazer Krauthäuptl Batavian (50 days) Krauthäuptl means an herb or plant with a head. Virtually identical to the Cybele Lettuce we offered in 1993, this Swiss Batavian forms a soft green head with frilly savoyed leaves tinged purple at their ends. Lighter than Sierra or Canasta; almost equally slow to bolt. Europeans prefer the richer flavor of Batavian lettuces like Grazer to blander Iceberg types. One of our most underappreciated cultivars; it's yummy! A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $5.50, E=28g, $9.50; 4oz, $37.50.

2876 New Red Fire (51 days) Offered as a substitute for Red Sails in 1992, Fire gained a well-deserved popularity with commercial growers. Has Sails' characteristic ruffled leaves, similar though slightly lighter coloration, and good size. Best of all, it has been absolutely the last to bolt in our lettuce patch, lasting as late as July 29! Seed from Japan. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $7.50, E=28g, $14.00; 4oz, $48.00.

Frank Morton

Frank Morton of Shoulder to Shoulder Farm in Philomath, OR calls seeds "the best deal in nature: dense nutritional matter with a self-organizing program and energy array. For cheap."

Without formal training, premeditation, or an economic plan, Morton accidentally became a seedsman. Beginning by selling salad greens to restaurants near and far, he and his wife Karen developed wild garden genepools to create a hyperdiversity of leaf forms, colors, textures and tastes. In the past four years they've introduced 22 varieties to the seed trade (not counting material offered only in their own catalog), including kales, orachs, mizunas, chrysanthemums, quinoas and lettuces. Their customers are commercial growers and small seed companies at the cutting edge like Shepherd's, Garden City, Seeds of Change, Nichols, J.L. Hudson, Johnny's–and Fedco. In 1996 we introduced their **Red Orach (#3148)**, in 1997 their **Blushed Butter Cos (#2836)** and **Blushed Butter Oaks (#2834)** lettuce gene pools, and in 1998 we are featuring their **White Russian Kale (#3385)**.

Morton's proudest accomplishment is not any particular variety, but the acceptance of several of his genetically diverse gene pools into the garden seed trade. As he has written, "Exposing gardeners to the idea that the 'genetically uncleansed' can be exciting, beautiful, useful...is a small step toward accepting diversity as an asset." He'll feel doubly rewarded if some gardeners are moved to select their favorite forms from these gene pools so that "new varieties or landraces appear in diverse climates around the country as a result of this aesthetic impulse."

Morton has moved beyond the preservation of heirlooms to the creation of composite populations formed by crossing several heirloom varieties. These may exhibit the same degree of vigor expressed by F-1 hybrids, but with a much broader base of genetic diversity. "Heirloom varieties are not the end of the line–they are the beginning of new lines."

Far from being his whole life, plant breeding and selection is "just another tool in the Wild Garden Life." Karen and Frank call their production area the Wild Garden. Their approach to sustainable agriculture is to return as many processes of production to the wild as they can. Beavers and coyotes, syrphid flies and wasps, weeds and wildlings are their teachers; integrating volunteer, wild and cultivated crops their technique; and an ecosystem of astonishing resilience and novelty their reward. They surround their terraced beds with sod pathways and leas where prairie and pasture grasses, clovers, wildflowers and naturalized wild greens commingle. They allow crops to bolt and flower to create continuous nectar, pollen, shelter and prey for beneficial species. Being part of an agroecological community is so much more satisfying and realistic to Morton than being its master. He points to the many ancient civilizations who thrived for centuries as subsistence farmers with increasingly sophisticated agricultural systems only to "disappear in a relative flash at what appeared to be the halcyon days of their civilization." We should be asking why.

Now breeders now harvesters, now homeschoolers now photographers, strawbale builders, archers and Wild philosophers, the Mortons live as they farm–like a meadow.

2884 Rossimo (52 days) Even in a trial with 110 types of lettuce in variegated colors, Rossimo's brilliant rich cherry-red crinkly leaved open head really stood out! Grows slowly but tolerates heat fairly well. Rossimo is Royal Red's look-alike twin and replacement. Spellbinding with its terrific bright red color in late June and early July. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $5.50, E=28g, $9.50; 4oz, $28.00.

2892 Red Riding Hood Butterhead (53 days) You'll keep the Big Bad Wolf away from the door if you grow this lovely butterhead with deeper red color and much better bolt resistance than Merveille des Quatre Saisons. Veined leaves; large, elegant heads. Close kin to Continuity. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $5.50, E=28g, $9.50; 4oz, $37.50.

2908 Pirat Butterhead (55 days) Elegant bronzed large butterhead always looks good in the trial. Has a delicious smooth taste, and holds well except in prolonged wet spells. Pirat descended from Merveille des Quatres Saisons but is much more bolt resistant. Seed organically grown. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $5.50, E=28g, $9.50; 4oz, $35.00.

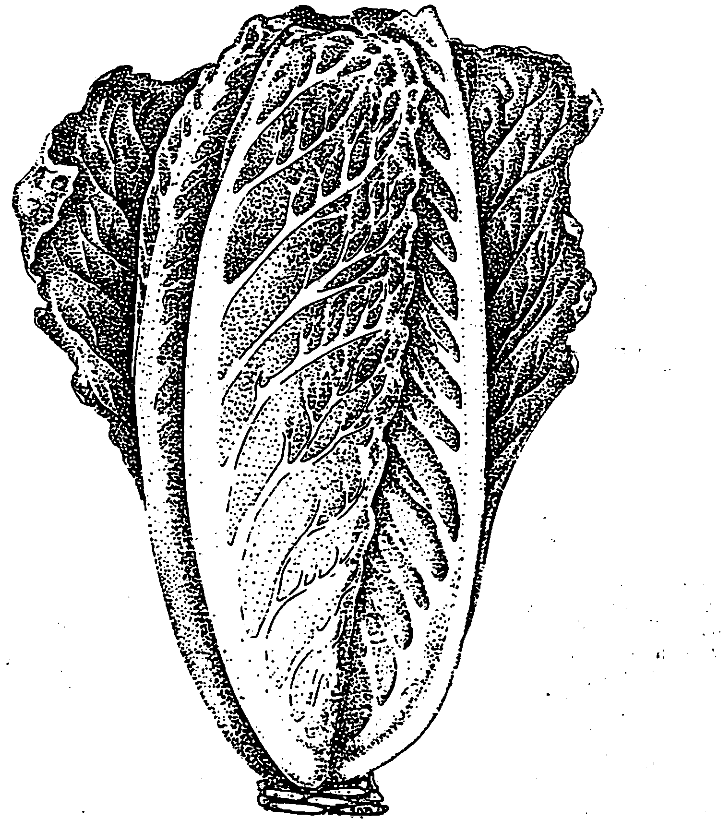
2912 Speckled Bibb (55 days) Also known as Sanguine Ameliore. An ornamental lettuce of spectacular beauty, its apple-green leaves are splashed with maroon flecks. Will be a stunner in your garden or your salad. Flavor is mild. Makes small firm Bibb-type heads, centers with soft leaves blanching creamy yellow. Seed probably brought to Lancaster, PA, prior to 1850 by Mennonite immigrants. Frank Morton, who got the stock seed from the Seed Savers Exchange, has been selecting to alleviate tipburn. NEW! A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $7.50, E=28g, $14.00; 4oz, $55.00.

2916 Sweet Valentine Butterhead (56 days) A lettuce fit for a sweetheart, Valentine combines magnificent beauty with a mild, sweet taste. Beginning as a large spreading bronzed butterhead with rounded veined leaves, Valentine evolves into a romaine shape. Was very slow to bolt even in our hot dry 1995 conditions. I don't know why sales dropped 50% from 1996 to 1997. Valentine is one of my favorites. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $5.50, E=28g, $9.50; 4oz, $32.00.

2924 Reine des Glaces Batavian (57 days) Also known as Ice Queen. We have located an Italian source for this scrumptious Batavian, which, in keeping with its type, makes a soft "head." Green convoluted rosettes with intricately toothed leaves lend Reine its distinctive beauty. Stands heat fairly well. Sales doubled in 1997; I am confident those who tried it will be back. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $5.50, E=28g, $9.50; 4oz, $30.00.

2938 Lollo Rossa Cutting (58 days) A unique type of lettuce generally harvested by snipping leaves instead of taking the whole plant. Frizzy foliage is light red on top, light green at base, making for a stunning contrast. Very cold hardy. Can be used to accent or garnish salads, or as an ornamental. Quite the rage in gourmet restaurants; a mainstay of our mesclun salads. We trialed four Lollos in 1994, and this Swiss strain was the best. Although not quite as colorful as several others, it had a milder, less bitter taste, and was much slower to bolt. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $5.50, E=28g, $9.50; 4oz, $20.00.

2948 Majestic Red Romaine (60 days) Its fancy savoyed rich bronze-red leaves make it a real stunner. Cylindrical "head" has somewhat spreading habit. One of the slowest-bolting romaines in our trial and much in demand in recent years. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $5.50, E=28g, $9.50; 4oz, $18.00.



2952 De Morges Braun (64 days) We owe our awareness of this unique lettuce to M. Schultz. Of the hundreds of lettuces we've grown, none other has the shimmery color of De Morges. As it matures, it grows upright like a romaine, its centers forming a green contrast to the pink outer leaves. Its texture and taste are as noteworthy as its color—smooth, buttery and not at all bitter. De Morges grows slowly and is one of the last to bolt. Rated "really special," the best of the 19 lettuces in this summer's trial at Hidden Valley Farm. Trialer Polly Shyka called it the "bronze beauty."NEW! A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $5.50, E=28g, $9.50; 4oz, $35.00.

2956 Plato II Romaine (65 days) A lettuce fit for a philosopher-king, Plato has all the elegance of the spreading open-habit romaine without any tendency to tipburn in heat. Plato sets the standard for sweet taste in romaine lettuce, holding its quality well into the summer without bitterness or bolting. Its dark green slightly ruffled heavily veined leaves are attractive in any plot. A real winner from Petoseed. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $5.50, E=28g, $9.50; 4oz, $15.00.

2962 Rouge d'Hiver Romaine (65 days) An attractive heirloom lettuce from France in the 1840s. Its broad flat leaves range in color from green to bronze to red, making it one of the most striking plants in the garden. Very delicious. Best suited for early crops; keep moist to forestall bolting. Turns bitter in excess heat. Seed organically grown. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $5.50, E=28g, $9.50; 4oz, $36.00.

2976 Empire Iceberg (72 days) Used as a substitute for King Crown on our 1987 order, we found it superior in our grow-out. Heads not as large as King Crown, but less prone to center rot or softness. Slightly larger than Ithaca and Summertime, heads not as firm. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $5.50, E=28g, $9.50.

2980 Lettuce Mix A mixture of lettuces with glorious contrasts of reds and greens and different leaf forms to create a beautiful patch. Components may vary, but all will be suitable for cut-and-come-again culture. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $5.50, E=28g, $9.50; 4oz, $35.00.

2986 Summer Lettuce Mix A special selection of red, green and bronze lettuce varieties that will stand into late July without bolting. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $7.50, E=28g, $14.00; 4oz, $55.00.

2992 Mesclun "Mesclun" is a term from Provence for their characteristic country salad mixtures. These mixes have captured the imaginations of stateside gardeners. The National Gardening Bureau declared 1997 "The Year of the Mesclun Mix" and indeed it was for our customers who purchased a record 2069 seed packages, more than 11 pounds. Our mix consists of two packets: the lettuce mix described in #2980, and a mixture of mizuna, chervil, endives, sorrel, Red Giant mustard, arugula, and tatsoi. Harvest these greens by cutting them with scissors. They will grow back, though you will need to water them in dry conditions. We recommend that you plant each packet in adjoining beds or rows so that the lettuces won't overwhelm the other greens. You can enhance your mesclun by adding other greens such as mâche, claytonia, and bronze fennel. Add edible flowers of garlic chives, nasturtiums, gem marigolds, borage, and mustard blossoms to lend further appeal to the mix by creating delectable color and taste contrasts. A=1g, 75¢, B=2g, $1.25, C=4g, $2.25, D=14g, $5.50, E=28g, $9.50; 4oz, $35.00.

GREENS

3008 Hopi Red Dye Amaranth (46 days) *Amaranthus cruentus* What could be more inspiring than to round a corner and come unexpectedly upon a whole bed of tall riotous versions of amaranth, some red and green, some red, green and yellow, and some just deep red? Hopi was the best of the nine kinds in our 1995 trial, displaying the deepest of burgundies from seedling to seeding. It took us 3 years to find seed. Stately plant grows 5'. The Hopis used it as a ceremonial dye plant. Eat the leaves when they are young in salads or slightly steamed, admire them young or old. The tiny black seeds are also edible. NEW! A=1/16oz, 50¢, B=1/8oz, 95¢, C=1/2oz, $3.00. *Not available in larger sizes.*

3012 Tricolor Amaranth (50 days) *A. tricolor* Could easily be listed with everlastings for the tall purplish-red seed spires which it sends up late in the summer. Earlier in the year its young green leaves overlaid with burgundy add zesty colors to salads. Flavor is somewhat like pigweed. *Seed in short supply, order early.* A=1/16oz, 50¢, B=1/8oz, 95¢. *Not available in larger sizes.*

3022 Arugula (47 days) *Eruca sativa* Also known as Rouquette or Rocket. Musky green will spice up your salad. Much better when grown for fall crop, as will bolt readily in heat. A prime ingredient in tangy mesclun mixes. Few people are indifferent to arugula: Most of us love it, a few find it inedible. Almost unknown 10 years ago, it is now so popular that we order 50-pound bags of seed! Our arugula has been tested for *Pseudamonas* with no disease found in the sample lot. A=1/16oz, 50¢, B=1/8oz, 95¢, C=1/2oz, $1.50, D=1oz, $2.60, E=4oz, $4.80; 1lb @$12.00.

CHARD *Beta vulgaris* (cicla group)

1/16 oz packet sows 12 ft, 1 oz plants 200 ft. Hardy.

3032 Fordhook Giant Swiss Chard (50 days) Broad white stems, leaves dark green and savoyed with white veins. The standard variety, introduced by Burpee in 1924. Strains of green swiss chard have been around since 1750. Very hardy. A=1/16oz, 50¢, ~92 seeds, B=1/8oz, 95¢, C=1/2oz, $1.50, D=1oz, $2.00, E=4oz, $3.60; 1lb @$8.00.

3034 Perpetual Spinach or Leaf Beet (55 days) Thanks to Pam Dawling of Twin Oaks Community Garden (VA) who suggested we add this member of the chard family. Leaf beet looks similar to garden variety swiss chards, but its stems are thinner, and its exceptionally tender leaves are smooth, rather than puckered. It tastes unlike any other chard, imparting a spinach-like flavor which lingers pleasantly. Unlike spinach, Perpetual lasts all summer and into fall as it withstands light and moderate frosts. Pam calls it a "must-grow." NEW! A=1/16oz, 50¢, B=1/8oz, 95¢, C=1/2oz, $1.50, D=1oz, $2.60, E=4oz, $4.80; 1lb @$10.00.

3036 Bright Lights Chard (56 days) Johnny's Selected Seeds won its second All-America award for making swiss chard commercially available in a rainbow of colors. Destined to become a home garden sensation, Bright Lights bathes stems, midribs and secondary veins in a panoply of gold, yellow, orange, pink, intermediate pastels and dazzling stripes. The AAS judges were impressed by the tenderness of its dark-green to bronze leaves and the mildness of its chard flavor. Young seedlings respond to cut-and-come-again culture, ideal for mesclun. Bright Lights was developed by John Eaton of Lower Hutt, New Zealand, who found the parent plants, a red one and a yellow one, in a small home garden in 1977 and crossed them to standard green and white varieties, selecting for color and flavor over the next fifteen years. Johnny's worked the past five years to preserve the strength and range of the individual colors. NEW! A=1/16oz, 50¢, B=1/8oz, 95¢, C=1/2oz, $3.00, D=1oz, $5.00, E=4oz, $15.00; 1lb @$50.00.

3040 Ruby Red Rhubarb Chard (59 days) Deep crimson stalks, dark-green leaves. Very hardy. Beautiful for edible landscapes. Heirloom from Europe goes back to 1857. A=1/16oz, 50¢, ~35 seeds, B=1/8oz, 95¢, C=1/2oz, $1.50, D=1oz, $2.60, E=4oz, $4.80; 1lb @$14.00.

CRESS *Lepidium sativum*

3050 Curly Cress (20 days) Bright green tightly ruffled leaves can be cut as soon as they are a couple of inches tall. Peppery flavor enlivens salads. Offered by C.P. Hirschy for a nickel a packet in 1890. A=1/16oz, 50¢, B=1/8oz, 95¢, C=1/2oz, $1.50, D=1oz, $2.00, E=4oz, $3.60; 1lb @$7.50.

See also watercress, #4694.

ENDIVE *Cichorium endivia*

1/16 oz packet sows 40 ft, 1 oz 650 ft.

3062 Très Fine Maraichere (42 days) Large frizzy endive with very fine ribs suitable for late spring and early summer harvests. Known to chefs as frisée. A=1/16oz, 50¢, B=1/8oz, 95¢, C=1/2oz, 1.50, D=1oz, $4.00, E=4oz, $14.00; 1lb @$52.00.

3084 Lorca (52 days) The curliest and most spread-out of the endives in our trial. Unlike TFM, the leaves are curly, not frizzy. Makes a beautiful plant with large, deep, thick heads which hold a long time. A=1/16oz, 50¢, *not available in larger sizes.*

3092 Broad-Leaved Batavian (85 days) Also known as Escarole. Smooth dark-green broad outer leaves with creamy yellow closely bunched center leaves described as thick and fleshy by Fearing Burr in Field and Garden Vegetables (1863). A=1/16oz, 50¢, B=1/8oz, 95¢, C=1/2oz, $1.50, D=1oz, $2.60, E=4oz, $4.80; 1lb @$9.00.

MÂCHE *Valerianella locusta*

Also known as Corn Salad, Lamb's Lettuce, Field Salad and Fetticus, mâche has a unique nutty flavor that really enhances salads. Harvest by pinching off the entire rosette at ground level. The once-humble peasant green is highly touted by Eliot Coleman, and has now gained favor in higher social strata. We added a second mâche in 1994 because of the growing interest in cold-tolerant vegetables for year-round gardening stimulated by Coleman's most recent book Four-Season Harvest (available in our book section, #6546).

3102 Verte de Cambrai (45 days) A small-seeded small-leaved strain which performs especially well in cool or cold conditions and is the best variety for overwintering. May be the same variety as grown by Thomas Jefferson in Monticello in 1810 under the name 'Candia.' A=1/16oz, 50¢, B=1/8oz, 95¢, C=1/2oz, $1.50, D=1oz, $2.60, E=4oz, $7.00; 1lb @$24.00. 28,000 seeds/oz.

3114 Large-Leaf Round (60 days) Vigorous-growing large-leaf strain which is suitable for sowing in spring for an early summer harvest. Seedsman Hirschy sold it for a dollar per pound in 1890. A=1/16oz, 50¢, B=1/8oz, 95¢, C=1/2oz, $1.50, D=1oz, $2.60, E=4oz, $7.00; 1lb @$24.00. 10,000 seeds/oz.

MUSTARD GREENS *Brassica juncea*

3138 Green Wave (45 days) Bright green color. Hot mustardy flavor; prime ingredient in spicy mesclun. Not as hot when parboiled. Will come back when cut; slow to bolt. 1957 AAS winner. A=1/16oz, 50¢, B=1/8oz, 95¢, C=1/2oz, $1.50, D=1oz, $2.00, E=4oz, $3.60; 1lb @$8.00.

3148 Red Orach (38 days) *Atriplex hortensis* Key salad ingredient also known as Mountain Spinach, this beautiful red-purple plant thrives in cool weather and should be sown as soon as the ground can be worked. Its spinach-shaped leaves have a mild flavor, and can be pinched back to encourage production and retard bolting. Produces an abundance of seed which can be saved, and will occasionally self sow in your garden. A=1/16oz, 50¢, B=1/8oz, 95¢, C=1/2oz, $3.00, D=1oz, $6.00, E=4oz, $24.00; 1lb @$90.00.

PARSLEY *Petroselinum crispum*

1/16 oz packet sows 25 ft, 1 oz 400 ft. Very hardy. Very slow to germinate (up to 30 days). Soaking seed 8-12 hours will hasten germination. Parsley seed is short-lived; test old seed before sowing.

3158 Gigante d'Italia (70 days) We were really wowed by its early seedling vigor and rich sweet flavor in our 1992 trial. Although the regular Plain Leaf eventually almost caught up in size (1') it never matched Gigante in flavor. Heirloom hails from northern Italy. A=1/16oz, 50¢, B=1/8oz, 95¢, C=1/2oz, $1.50, D=1oz, $2.00, E=4oz, $3.60; 1lb @$8.00.

3166 Forest Green (75 days) Combination double-and triple-curled with long, upright stems. Holds color well all season. A=1/16oz, 50¢, B=1/8oz, 95¢, C=1/2oz, $1.50, D=1oz, $2.60, E=4oz, $4.80; 1lb @$12.50.

3174 Plain Leaf (80 days) Flat glossy dark-green leaves with strong flavor. A=1/16oz, 50¢, B=1/8oz, 95¢, C=1/2oz, $1.50, D=1oz, $2.60, E=4oz, $4.80; 1lb @$8.00.

3192 Broad-Leaved Sorrel (60 days) *Rumex acetosa* Perennial often known as Sour Grass likes cool weather, acid soil, and plenty of water. Lemony flavored sword-shaped leaves add tang to soups and salads. To maintain steady supply of tender leaves, keep cutting and never let seed stalks mature. Makes a tasty spring tonic in salads. A=1/16oz, 50¢, B=1/8oz, 95¢, C=1/2oz, $1.50, D=1oz, $2.60, E=4oz, $7.00; 1lb @$19.00.

ORIENTAL GREENS

We do considerable trials work with these greens in search of new opportunities to broaden our palates.

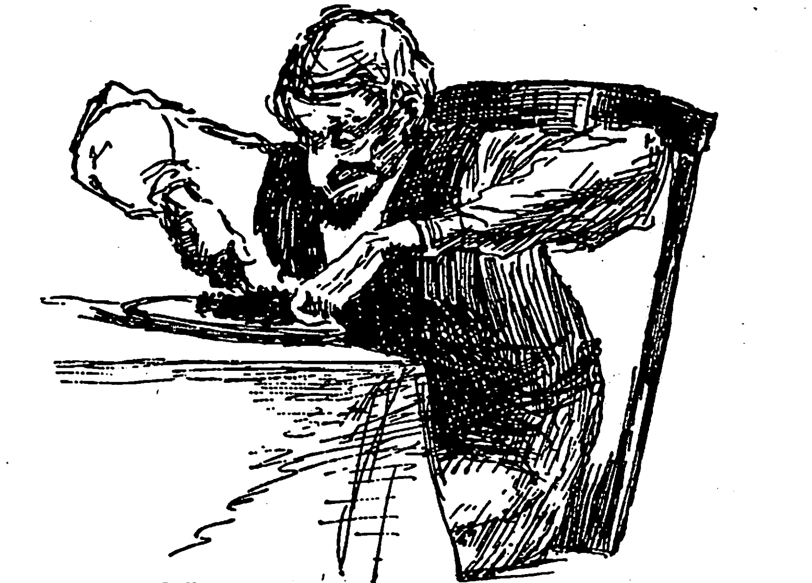
3208 Maruba Santoh (35 days) *B. rapa* (pekinensis group) With Maruba you get two vegetables in one: a mild piquant flavor similar to mustard in the loose round light green leaves and a juicy, crisp pac choi taste in the flat white stem. Fairly bolt tolerant, so plant after the early spring flea beetle invasion subsides. A=1/16oz, 95¢, B=1/8oz, $1.70, C=1/2oz, $2.80, D=1oz, $4.00, E=4oz, $11.00.

3218 Senposai (40 days) F-1 hybrid. This exciting new green, developed in Japan, is a cross between Japanese Mustard Spinach (Komatsuna *B. rapa*) and regular cabbage. Its round medium-green leaves are reminiscent of collards, with a delicious lighter taste, and are wonderful in *Okonamiyaki*. Best of all, Senposai stands the entire summer and goes well into fall before bolting! Open plant habit needs 12-18" per plant. A=1/16oz, 95¢, B=1/8oz, $1.70, C=1/2oz, $2.80, D=1oz, $5.00, E=4oz, $19.00.

MUSTARDS

1/16 oz packet sows 40 ft, approx 15,600 seeds per oz.

3228 Mizuna (40 days) *B. r.* (japonica group) Vigorous heirloom Japanese mustard produces slender white stalks with deeply cut and fringed dark green leaves. Not pungent. One planting could suffice for full season production if you kept it cut and irrigated in dry spells. Three or more successions would be required for the more discriminating connoisseur because the young leaves are more tender. In our 1995 trial, this strain was considerably more bolt-resistant than Kyona. Biennial. Essential in mild mesclun. A=1/16oz, 95¢, B=1/8oz, $1.70, C=1/2oz, $2.80, D=1oz, $4.00, E=4oz, $11.00; 1lb @$30.00.



3232 Tokyo Belle (42 days) *B. r.* (japonica group) Dropped by our supplier. *Unavailable in 1998.* We recommend #3234 Tokyo Beau.

3234 Tokyo Beau (45 days) F-1 hybrid. *B. r.* (japonica group) A hybrid version of Mizuna with bigger, broader leaves; thicker, wider and whiter stems; and more vigor. Milder and sweeter flavor than Toraziroh. A dual purpose vegetable: The leaves can be cut like Mizuna's; the stem can be enjoyed like pac-choi or chinese cabbage. Both leaves and stems are excellent stir-fried or braised. Although Beau stood all summer with only scattered bolting, it is particularly cold tolerant as well. A=1/16oz, 95¢, B=1/8oz, $1.70, C=1/2oz, $2.80. *Not available in larger sizes.*

3236 Red Giant (45 days) *B. juncea* (integlifolia group) Large purple-tinted savoyed leaves make the 18" plants very decorative. Gene compares their taste to horseradish. I prefer to call it "peppery." It is less hot during cool weather. This heirloom Japanese mustard is a standard ingredient in spicy mesclun. A=1/16oz, 95¢, B=1/8oz, $1.70, C=1/2oz, $2.80, D=1oz, $4.00, E=4oz, $11.00; 1lb @$32.00.

3244 Tatsoi (45 days) *B. r.* (narinosa group) Also known as Tah Tsai. Spoon-shaped thick dark-green leaves make beautiful compact rosettes with mild brassica flavor. Good stir-fried. Will come back when cut. Since our purchaser Nikos Kavanya first brought it to our attention, it has become an essential ingredient in our salads and mesclun. A=1/16oz, 95¢, B=1/8oz, $1.70, C=1/2oz, $2.80, D=1oz, $4.00, E=4oz, $11.00; 1lb @$24.00.

3252 Toraziroh (45 days) *B. alboglabra* Here's a robust performer with just the right kind of mustardy bite. It rapidly develops prolific yields of large very dark green leaves distinctively but not overwhelmingly pungent. In two years of trials won many favorable reviews from brassica lovers. Stems, also edible, have a flavor somewhat like pac choi. Relatively slow to bolt. A=1/16oz, 95¢, B=1/8oz, $1.70, C=1/2oz, $2.80, D=1oz, $4.00, E=4oz, $15.00.

PAC CHOI *B. r.* (chinensis group)

1/16 oz packet sows 30 ft, approx 12,500 seeds per oz. Pac choi and carrots are among the best sources of Vitamin A.

3260 Mei Qing (45 days) F-1 hybrid. Baby pac choi with green stems likes cool temperatures. Bolt resistant. Vase-shaped plants have broad green petioles with beautiful dark leaves. A=1/16oz, 95¢, B=1/8oz, $1.70, C=1/2oz, $6.00, D=1oz, $10.00, E=4oz, $36.00.

3270 Prize Choy (50 days) Classy pac choi with celery-like white stems and vase-shaped 15-18" tall heads. Seed organically grown. A=1/16oz, 95¢, B=1/8oz, $1.70, C=1/2oz, $4.00, D=1oz, $7.00, E=4oz, $22.00; 1lb @$85.00.

CHINESE CABBAGE *B. r.* (pekinensis group)

1/16 oz packet sows 25 ft, approx 9,500 seeds per oz.

3276 Blues (52 days) F-1 hybrid. Better bolt resistance, disease resistance and taste than Nagoda 50. Flavor is relatively pungent. Suitable for planting early spring through July. You won't have to pay many dues to enjoy these Blues! Moderate tolerance to virus, DM,ALTS,BSR. A=1/16oz, 95¢, B=1/8oz, $1.70, C=1/2oz, $6.00, D=1oz, $11.00, E=4oz, $40.00.

CHRYSANTHEMUM *C. coronarium*

3292 Garland Serrated (40 days) Grown for its aromatic greens with an unusual taste appreciated by devotees. Compared to other Shungiku varieties in our trial, this strain was superior: Its 5" flowers (buttercup yellow, edged in white with serrated tips) were larger and better for the edible flower market and its small grey-green serrated leaves had distinctly more chrysanthemum taste. The Japanese use it in hearty one-pot winter stews known as *oden*. Also good in salads, soups, and stir-fries. Plant thickly in early spring (or summer for a fall crop) and harvest green leaves when stems are 4-8 inches tall, before buds appear. A=1/16oz, 95¢, B=1/8oz, $1.70, C=1/2oz, $2.80, D=1oz, $4.00, E=4oz, $11.00; 1lb @24.00.

OPEN-POLLINATED BRASSICA

2 gram packet sows 45 ft. About 8,000 seeds per oz. Hardy. May be started indoors Mar.-Apr. for setting out in May, or direct-seeded in May or June for fall crop. For better stands in dry conditions sow in trenches. Kale and collards should be direct-seeded in July for Sept. maturity. Require warm temperatures to germinate. Need 60s during seedling stage for optimal growth; higher temperatures make seedlings leggy. Heavy feeders; for best growth, need regular moisture and 2-3' spacing. Combat cabbage loopers with Bt (see **#8901-7** in the supplies section). Use floating row covers to keep out flea beetles. When cauliflower heads first appear, bend leaves over curd to prevent discoloring. Some brassica varieties perform poorly in hot summers. Cauliflower and broccoli are damaged by hard frosts, especially in spring. Brussels sprouts and kale are the hardiest members of the group. Over the past thirty years broccoli consumption has increased tenfold, but still only equals 3.3 lb. per capita per year. Broccoli contains significant levels of sulforaphane, a substance that helps detoxify carcinogens from the body. Broccoli is also exceptionally high in vitamins A and C, and along with collards and kale, a rich source of calcium. Research indicating that broccoli seed sprouts are more effective in combating cancer than the vegetable itself caused a run on open-pollinated broccoli seed supplies this fall. *The broccoli seed which we offer is not food grade and we cannot guarantee that it is fit for human consumption. We have no control over the conditions in which it is stored before it reaches us. Please consult your health food wholesaler or retailer for sprouting seed.*

3310 Thompson Broccoli (92 days) *B. oleracea* (botrytis group) Oregon breeder Tim Peters, who has done much work with open-pollinated broccoli, rates Thompson as better than his earlier development Umpqua. When grown under fertile conditions, Thompson shows excellent resistance to stress and greater uniformity than Umpqua. Dark green heads average 5-6" in diameter, a few days later and without the occasional throwbacks which marred Umpqua. We are pleased to offer this excellent open-pollinated broccoli for fall crops. A=2g, 60¢, ~400 seeds, B=4g, $1.00, C=14g, $2.50, D=28g, $4.50, E=112g, $16.00; 1lb @$55.00.

3324 Early Jersey Wakefield Cabbage (63 days) *B. o.* (capitata group) This wonderful early cabbage originated in England in the early 1800s and has been a favorite in America for 150 years. Wakefield's compact medium 2-3 lb. heads are distinctively pointy, if not intellectual. (Mark Twain said that a cauliflower is a cabbage with a college education, so I guess Wakefield did not matriculate.) Tender, flavorful waxy-looking Wakefield has stood the test of the ages and is still prized by home and market gardeners alike. A=2g, 60¢, B=4g, $1.00, C=14g, $1.60, D=28g, $2.50, E=112g, $4.00; 1lb @$9.00.

3334 Laso Red Cabbage (75 days) Slightly dwarfed variety with attractive round 2-3 lb. heads. Few wrapper leaves. A=2g, 60¢, ~1000 seeds, B=4g, $1.00, C=14g, $1.60, D=28g, $2.50, E=112g, $7.50; 1lb @$24.00.

3348 Dominant Cauliflower (94 days) *B. o.* (botrytis group) Where adaptable, Dominant produces a beautiful fall crop of elegant 4-6 lb. heads. It does not perform well in sandy soils under dry conditions, but is a star on highly fertile loams and clay soils. Suitable only for late crops. A=2g, 60¢, ~500 seeds, B=4g, $1.00, C=14g, $3.00, D=28g, $5.00, E=112g, $19.00.

3358 Champion Collards (60 days) *B. o.* (acephala group) Rich dark strain selected to stand longer. Resembles kale, but not savoyed. Thin to 12" apart for good size. Best as a fall crop. For greens into November; popular in the South for greens throughout the winter. A=2g, 60¢, ~665 seeds, B=4g, $1.00, C=14g, $1.60, D=28g, $2.50, E=112g, $4.00; 1lb @$7.00.

3372 Konserva Kale (60 days) *B. o.* (acephala group) Heavier yielding than Vates. Plants grow 2-2½' tall, leaves curl in cold weather. Very nutritious and exceptionally cold hardy. A=2g, 60¢, ~665 seeds, B=4g, $1.00, C=14g, $1.60, D=28g, $2.50, E=112g, $7.50; 1lb @$12.50.

3382 Red Russian Kale organic seed (60 days) *B. napus* (pabularia group) Called Buda Kale by Fearing Burr in 1863 and Ragged Jack by Vilmorin-Andrieux in 1885. Russian traders brought this Siberian heirloom to Canada in the 19th century. It has undergone a rousing revival in the last ten years. Its oakleaf foliage colors after fall frosts. Red and purple leaves change to dark green when cooked. Use soon after picking; wilts quickly. Vigorous edible landscape plant has proven a big hit with customers for its unsurpassed tenderness and delicate flavor. Seed organically grown in Washington state. A=2g, 60¢, ~400 seeds, B=4g, $1.00, C=14g, $3.00, D=28g, $5.00, E=112g, $16.00; 1lb @$58.00.

3383 Red Russian Kale commercial seed (60 days) Same as above except commercially grown seed is more economical in the larger sizes. A=2g, 60¢, B=4g, $1.00, C=14g, $1.60, D=28g, $2.50, E=112g, $5.00; 1lb @$16.00.

3385 White Russian Kale (60 days) A flat-leaf Siberian type, silvery green with white veining. Similar to Red Russian, but a few inches taller, a third more productive, with larger, more serrated leaves. Also, much hardier than Red Russian, will hold into November without protection and thrive in an unheated greenhouse, even if temperatures go down to 0°. Gene has harvested White Russian outdoors in Waterville out of the January snow. If season is extended, White Russian will produce new clusters of smaller tender secondary leaves from old axils. As with other Siberian Kales, flavor gets sweeter with frost. NEW! A=2g, $1.20, B=4g, $2.00, C=14g, $6.00, D=28g, $11.00, E=112g, $36.00.

3387 Cavolo Palmizio or Nero di Tuscana (62 days) *B. o.* (acephala group) Also known as Dinosaur or Lacinato Kale. Described by Vilmorin-Andrieux in 1885. Cavolo Palmizio seems elemental, a stripped-down version of kale shaped like a miniature palm tree about 18" high. Very dark-green wrinkled strap-like leaves appear almost black at a distance, looking minimalist compared with the more common lush curly leaved kales. Delicious and nutritious as well as adaptable to a wide temperature range, its sweet mild flavor improves after frost. We thank Faviana Olivier for acquainting us with this unique heirloom and providing us with the stock seed. Seed grown without pesticides or chemical fertilizers by Frank Morton in Oregon. NEW! A=2g, $1.20, B=4g, $2.00, C=14g, $6.00, $1.60, D=28g, $11.00, E=112g, $36.00.

3390 Early White Vienna Kohlrabi (58 days) *B. o.* (gongylodes group) Early dwarf heirloom variety with short tops and medium-sized stems. Bulbs have crisp white tender flesh with a pungent taste. Don't like kohlrabi? Try harvesting it young when it tastes like a humble version of the globe artichoke. Its texture turns tough, woody, and inedible if you wait too long. From Central Europe before 1860. A=2g, 60¢, B=4g, $1.00, C=14g, $1.60, D=28g, $2.50, E=112g, $4.00; 1lb @$12.00.

3392 Gigante Kohlrabi (130 days) *B. o.* (gongylodes group) Tom Vigue and Eileen Fingerman introduced us to this Czechoslovakian heirloom, a staple of their root cellar. Unlike other kohlrabi, Gigante doesn't get woody even when it grows enormous. And it can grow quite large, regularly exceeding 10" in diameter and 10 lb. According to Nichols Garden Nursery, the world record is 62 lb., leaves included. Even in the spring, its crisp white mildly tangy flesh stays tender and never gets fibrous. Gigante will add zest to your meals while you await the first edible greens of spring. Sow in spring for late fall harvest. NEW! A=2g, 60¢, B=4g, $1.20, C=14g, $4.00, D=28g, $8.00, E=112g, $25.00.

Photo by Betsy Mitchell

Elwyn Meader

If you've ever grown vegetables or raised fruit or flowers, Professor Elwyn M. Meader's work has probably touched your life. Always a generalist, Meader introduced more than 60 varieties from beets to peaches, from kiwi fruit to chrysanthemums. His dedicated unselfishness in sharing germplasm and ideas with colleagues throughout the world may have been an even greater contribution than his varieties.

At least half his introductions came after he "retired" from a distinguished 18-year career as plant breeder at the University of New Hampshire. He could have gotten rich from royalties on all his releases, but instead he gave them away "as payment for his space on the planet." "I was working for the taxpayers," he would say in his broad Yankee accent, "and the results of my work belonged to them."

A deeply religious Quaker, Meader was always modest about his creations, but not shy about his opinions. He disdained plant patenting. "Plants shouldn't be patented if there has been one dollar of federal or state money used to fund development." At one point in the 1950s he refused to serve on university committees (except one to abolish all committees) maintaining he had been hired to do breeding work only. He offered inspiring advice to the wave of homesteaders who arrived in the sixties, "Try all things. Hold on to that which is good," but added curtly, "If you can't make it without bringing along your TV, you'd better forget the whole thing."

Meader found much of his original material in Korea from 1946-1948 while serving as a horticulturalist for the U.S. army command. Present strains of gynoecious (all female) hybrid pickling cucumbers, which have revolutionized the pickling industry, derive from germplasm he collected in Korea. He recognized cold hardiness, photoperiod adaptation and disease resistance in Korean plant material, and later introduced those traits into his squash, soybean, melon and raspberry varieties. While traversing a Korean mountainside he found seeds for the Miss Kim Lilac which became a nursery industry standard.

He credited his development of Royalty Purple Pod bean to his wife's suggestion that it would be easier to pick beans if the pod color differed from the vine color. He also did considerable work reselecting **#3392 Gigante Kohlrabi.**

Meader became legendary for his acute powers of observation, precision of detail and almost total recall of information he had gleaned from decades of studying plant characteristics. His passing in 1996 may have closed an era. Proud of his self reliance (for example, he cut all his firewood using only hand tools), Meader asserted that "a committee of one works best." But he also believed that the most valuable thing he'd ever done was to give things away. "Cast your bread upon the waters and you'll get it back in many days."

3396 Quarantina Raab (40 days) *B. rapa* (ruvo group) New in 1997 and an instant hit. Also known as Rapini here and *Broccolo Asparago* in Italian, Quarantina means "40 days." Raab is a non-heading version of broccoli with a more pungent flavor. Sow early spring to late summer. Harvest young stems, leaves and small flower buds. Steam, stir-fry or add to salads. A=2g, 60¢, B=4g, $1.00, C=14g, $1.60, D=28g, $2.50, E=112g, $10.00.

HYBRID BRASSICA

About 8,000 seeds per oz (28.4g).

BROCCOLI *B. o.* (botrytis group)

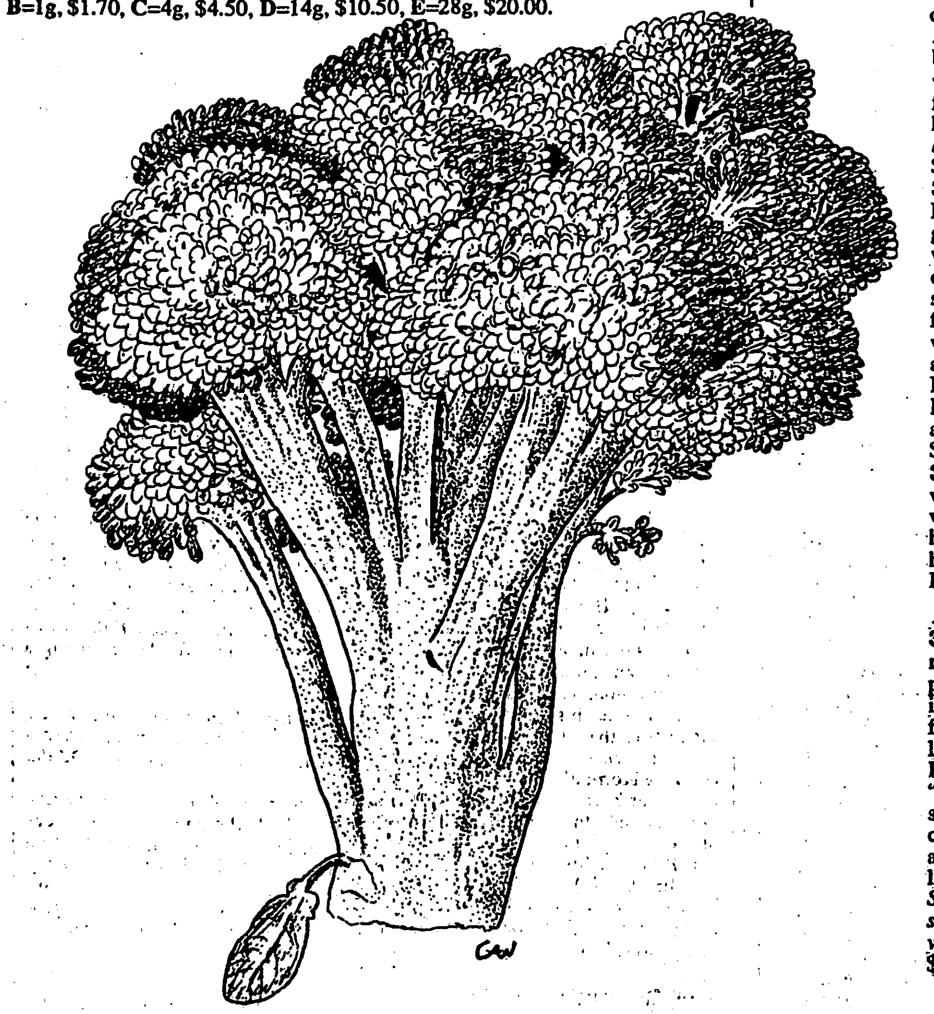
3410 Packman (73 days) The best choice for earliest broccoli, since we cannot get seed for our old favorite Bravo. Packman produces 6-7" flat-topped heads. Usually reliable but will button if stressed by extreme cold or excessive moisture. From Petoseed. A=½g, 95¢, B=1g, $1.70, C=4g, $4.50, D=14g, $10.50, E=28g, $20.00.

3422 Emperor (78 days) Heads avg. 6-8", the most perfectly domed heads which stay very tight on long stems. Quite uniform except in very hot weather. Nonstop producer of robust side shoots till cold weather, some as big as main heads! By far our best-selling broccoli, with over 1500 packets in 1997. The grower has discontinued production of this superb broccoli. This is the last year we will have any available. *Seed in short supply, order early*. Some BR and DM tolerance. A=½g, 95¢, ~125 seeds. *Not available in larger sizes.*

3434 Premium Crop (82 days) Long the standard main crop broccoli for commercial growers. Uniform, dependable with large 8" heads. Very few side shoots. Harvest early in rainy weather to avoid rot in centers. 1975 AAS winner from Takii in Japan. Tolerant to DM. A=½g, 95¢, ~125 seeds, B=1g, $1.70, C=4g, $4.50, D=14g, $10.50, E=28g, $20.00.

3442 Green King (85 days) Green King's exceptional tenderness made it the best-tasting of the 23 varieties in our 1994 trial. Green King also scored high for its consistent yield of large uniform high-quality 8" heads. Market growers will appreciate its uniform ripening. Vigorous plants bear thick blue-green domed heads with rather large beads. Side shoots are large but not plentiful. Green King stands heat well. Be sure to try this outstanding find which could set the standard for the next generation of hybrid broccoli. A=½g, 95¢, ~165 seeds, B=1g, $1.70, C=4g, $4.50, D=14g, $10.50, E=28g, $20.00.

3452 Green Valiant (90 days) This excellent fall broccoli makes irregular heads in midsummer heat. Compact plants with very dense light green heads on heavy stems. Even at 8-9" diameter, heads remain extremely tight. 2nd only to Emperor as prolific side shoot producer. A=½g, 95¢, ~125 seeds, B=1g, $1.70, C=4g, $4.50, D=14g, $10.50, E=28g, $20.00.



Tim Peters

If Tim Peters has his way, we may someday enjoy a new member of the brassica family that's even odder than kohlrabi. Steve Solomon, founder of Territorial Seed Company in Oregon, once referred to Peters as "our local Burbank." Peters has achieved his most notable commercial successes with broccoli, a vegetable so difficult that it could justly be called a plant breeder's nightmare.

Broccoli has a genetic incompatibility mechanism that prevents self-pollination and also exhibits strong inbreeding depression, which means that using inbreeding alone as a technique for genetic uniformity will result in small, weak plants. Peters had to use a whole tool chest of techniques, including bud-pollinating, crossing, inbreeding, selecting, pooling, mass-selecting and reselecting. When he released Umpqua in the late 1980s, it was the only decent open-pollinated broccoli available. In the mid '90s Umpqua gave way to **#3310** Thompson, a Peters improvement which we have offered the past four years. Peters reports further developments which he hopes to have available soon.

Since early childhood, Peters has been fascinated by the workings of heredity. The summer he turned 14 he figured out how to cross pollinate tomatoes. From then on, he was a plant breeder, learning by trial and error. By 30 he was working with Territorial Seed Company as their trials manager and later research director, grounding him in the varieties available and giving his breeding work a practical focus. In recent years, he's sent out his own seed catalog, offering over 100 of his own open-pollinated varieties and breeding lines.

In addition to broccoli, he's introduced an intriguing line of "Treasure" storage tomatoes. Currently he's working on turnip-rooted napa cabbage, kales that make broccoli or cauliflower heads, and perennial grains including sorghum, wheat, rye, triticale and millets.

Peters laments the slow pace and high costs of his research. He has yet to find a way to make his work pay financially. He regards most of his introductions to date as "just genetic steppingstones in the path to something better. Just as we wish our own offspring to excel, so I wish the offspring of my varieties to excel–to do all that their parents did and more."

3462 Arcadia (94 days) Growers who like Green Valiant's dense heads but not its light green color will appreciate Arcadia's frosty bluish-green heads with very refined, small beads that hold a long time. Arcadia was the only broccoli which performed well in our trials during the hot summers from 1989 through 1991. Gently mounded dome-shaped heads are consistently of marketable quality. *The best broccoli for midsummer*. A=½g, 95¢, ~100 seeds, B=1g, $1.70, C=4g, $4.50, D=14g, $12.00, E=28g, $22.00.

3472 Natalino Romanesco (120 days) Open-pollinated. Romanesco is a unique heirloom Italian broccoli. When well grown, it is one of the most beautiful plants in the garden with its cone-shaped, somewhat irregular whorl of chartreuse florets. When not well grown, the whorls are small and ugly. The trick is to maintain extremely high soil fertility. We had fantastic results planting in raised beds with 8" of well-rotted manure. Well-grown plants are huge, and need about 10 sq. ft. each. Should be started indoors in March or April and transplanted out in late May or June. Maturity is irregular and can occur any time between August and October. A=½g, 95¢, ~125 seeds, B=1g, $1.70, C=4g, $4.50, D=14g, $7.00, E=28g, $12.00.

3475 Broccoli Blend (73-94 days) For home gardeners who want broccoli to mature over a long season, a mix of varieties in one packet makes a lot of sense. Begin your harvest with Packman and carry through to Arcadia without having to purchase a full packet of each kind. A=½g, 95¢, B=1g, $1.70, C=4g, $4.50, D=14g, $10.50, E=28g, $20.00.

BRUSSELS SPROUTS *B. o.* (gemmifera group)

3480 Prince Marvel (110 days) Nikos' inspiration to replace Jade Cross E with the Prince has proven very popular with customers. We've sold more than 2450 packets in the last two years. Compared to Jade, Prince Marvel has firmer and smoother sprouts, which are more uniform and less likely to rot at the bottom or to grow large and loose. But the real reason to try Prince Marvel is taste. Nikos says, "Until I cooked Prince Marvel I was definitely not a brussels sprouts fan and all of my kids hated them. Now we all clamor for more." For best results, start indoors in spring and transplant into very rich soil. Sprouts taste better after light frosts and can be harvested into December some years. *Seed rated low for vigor by our supplier. In our experience, seedlings start very slowly, but equal or surpass comparable varieties by harvest time*. A=½g, 95¢, ~50 seeds, B=1g, $1.70, C=4g, $4.50, D=14g, $15.50, E=28g, 30.00.

CABBAGE *B. o.* (capitata group)

3503 Hermes (62 days) F-1 hybrid. Quick as Mercury, Hermes is off and growing, producing its 2 lb. round heads in record time. Perfect for the home garden where its compactness permits closer spacing, its small firm heads allow quick consumption and its resistance to bursting preserves its usefulness even if you dally. One head in our trials stood for over a month. Factor in its small core, rich dark green color and excellent flavor and you have one heckuvan appealing early cabbage. *Caution: Hermes seedlings drop leaves in cold, windy conditions.* A=½g, 95¢, B=1g, $1.70, C=4g, $4.50, D=14g, $10.50, E=28g, $20.00.

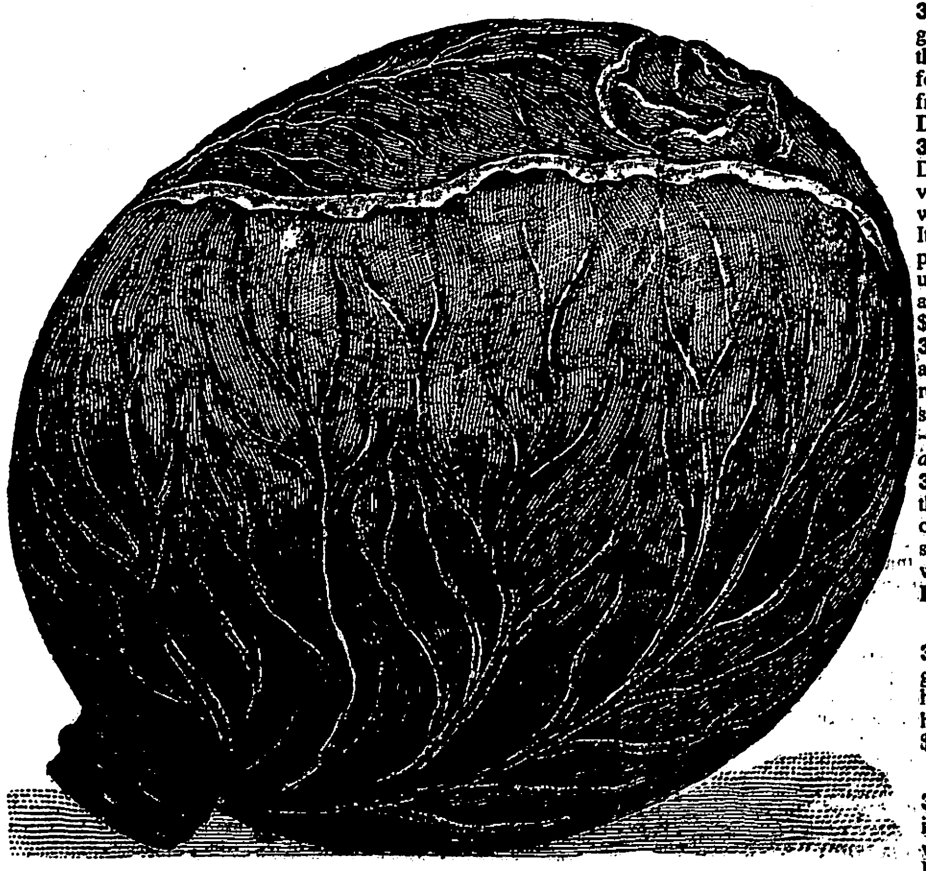
3506 Columbia (74 days) Oh! Columbia the gem of the cabbage, Columbia the most perfect ball! Seriously, we've missed Perfect Ball, too, but the trend is toward smaller cabbages like Columbia, whose motto could be "more cabbage in less space." Compact plants stand crowding well and deliver 2-4 lb. very solid round blue-green heads 6" in diameter which hold for a long time without splitting. Best of all, Columbia comes through with a delicious sweet flavor that just might remind you of Perfect Ball. Resistant to tipburn and FY. NEW! A=½g, 95¢, B=1g, $1.70, C=4g, $4.50, D=14g, $10.50, E=28g, $20.00.

3508 Grand Prize (76 days) The top choice in Jeanne Griffin's early cabbage trial for us. "Has the extra size, sweet juicy flavor, and classy looks uncharacteristic of early varieties!" says Jeanne. Slightly flattened heads average 5 lb. with tight wrapper leaves. Fusarium yellows resistant. Henry Tewksbury of Brattleboro, VT reports: "Grand Prize made the best sauerkraut ever and lasted fresh in my basement until mid-February." A=½g, 95¢, ~125 seeds, B=1g, $1.70, C=4g, $4.50, D=14g, $6.00, E=28g, $10.00.

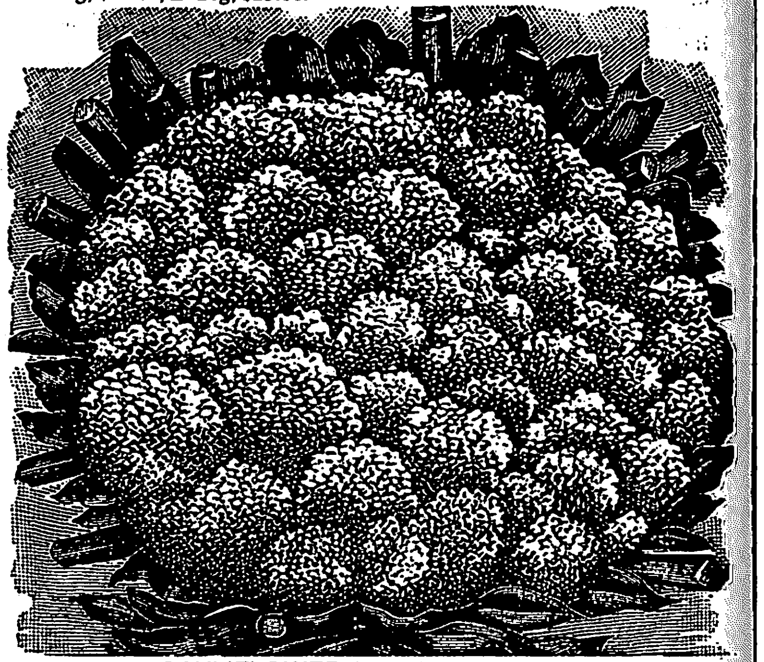
3518 Julius Savoy (80 days) We've trialed a number of savoy cabbages and Julius is head and wrappers above the rest, remarkable for its heavily savoyed 4-5 lb. tight blue-green heads ripening just before midseason. Each is a uniform perfectly proportioned globe. Julius will just draw you into the cabbage patch to admire it. We wouldn't have believed a green cabbage could be so handsome. Not yellows tolerant. A=½g, 95¢, B=1g, $1.70, C=4g, $4.50, D=14g, $10.50, E=28g, $20.00.

3526 Super Red 80 (80 days) Super Red 80 ripens after Laso, but well before Ruby Perfection, with tight round medium-dark red heads in the 3-5 lb. range. Splendid appearance will please market growers. A=½g, 95¢, B=1g, $1.70, C=4g, $4.50, D=14g, $15.00, E=28g, $28.00.

3536 Ruby Perfection (85 days) This fancy midseason type has produced some of the loveliest cabbage we've ever seen: solid deep purple-red globe-shaped heads averaging 4-6 lb., occasionally reaching 8 lbs. A great storage cabbage; will keep till May in the root cellar. Low tolerance to black rot. A=½g, 95¢, ~125 seeds, B=1g, $1.70, C=4g, $4.50, D=14g, $15.00, E=28g, $28.00.



3540 Scanbo (95 days) No, it's not a Sambo, a Rambo, a scam or a supermarket scanner. It's a storage cabbage. Lousy name, good keeper, the best in Donna Dyrek's storage trial, lasting until May 1 heeled into dirt in her root cellar. Scanbo produces medium-sized sweet dark 4-5 lb. green heads, very firm and solid straight through the core. Late Langendijk type can be spaced closely. Tolerant to Mycosphaerella and thrips. Our years-long search for a tasty longkeeping storage cabbage reached fruition in Scanbo. Now if only someone could teach whoever named it a little bit about elementary marketing...! A=½g, 95¢, B=1g, $1.70, C=4g, $4.50, D=14g, $13.00, E=28g, $25.00.



CAULIFLOWER *B. o.* (botrytis group)

3544 Majestic (68 days) Our earliest cauliflower, reliable and reasonably sized for summer production. Heads average 5-6", weighing from 10 oz. to 1 lb. with good color, and rugged enough to withstand hot dry conditions. A=½g, 95¢, ~100 seeds, B=1g, $1.70, C=4g, $4.50, D=14g, $12.00, E=28g, $22.00.

3552 Snow Crown (70 days) Makes cauliflower a cinch to grow. Dependable producer of uniform 6-7" heads early summer through October. Drought resistant. Very early. Some tendency for pink heads in adverse conditions. 1975 All-America winner from Takii. A=½g, 95¢, ~70 seeds, B=1g, $1.70, C=4g, $5.00, D=14g, $17.00. *Not available in larger sizes.*

3562 Rushmore (74 days) We haven't trialed it in South Dakota, but Rushmore stands alone as the best second-early variety for the Northeast. A reliable producer of uniform 2 lb. very white high-domed curds which have looked good even in the heat. Its large frame and dark green leaves provide some curd protection from sun and frost. Slightly larger, later and more uniform than Snow Crown with no pink heads. Introduced in 1996 and an instant hit. A=½g, 95¢, B=1g, $1.70, C=4g, $5.50, D=14g, $18.00. *Not available in larger sizes.*

3570 Violet Queen (80 days) About halfway between broccoli and cauliflower, each plant sets one purple head which doesn't require tying. No side shoots. A tasty novelty for adding color to salads and dips. Turns light green when blanched. A=½g, 95¢, ~100 seeds, B=1g, $1.70; C=4g, $5.50, D=14g, $18.00. *Not available in larger sizes.*

3578 Candid Charm (95 days) Charm produces large curds, in the same class as Dominant, but less fussy. Holds snow-white color a long time. Recommended for fall crops only. We've grown some awesome heads. Our largest, 12x14", weighed 6½ lb. and won a $5 bet. Most were in 3-4 lb. range. A=½g, 95¢, ~100 seeds, B=1g, $1.70, C=4g, $4.50, D=14g, $13.00, E=28g, $25.00.

KALE *B. o.* (acephala group)

3586 Winterbor (60 days) Winterbor was the most vigorous grower in each of our last three kale trials, showing the best cold hardiness and the richest blue-green color. Curled leaves are highly ruffled. A=½g, 95¢, ~100 seeds, B=1g, $1.70, C=4g, $4.50, D=14g, $15.50, E=28g, $30.00.

KOHLRABI *B. o.* (gongylodes group)

3594 Kolibri (45 days) The best purple kohlrabi we've found. It is quick growing, very uniform, purple on the outside, crisp and white on the inside. A=½g, 95¢, B=1g, $1.70, C=4g, $4.50, D=14g, $15.50, E=28g, $30.00.

ARTICHOKE, CELERY, EGGPLANT, OKRA

Days to maturity are from date of transplanting, not seeding.

GLOBE ARTICHOKE *Cynara scolymus*

Start indoors at temperatures as near 60° as possible and avoid direct hot sun or overwatering (misting is preferred). Use IRT plastic mulch and/or row covers. Feed heavily and give almost as much space as Romanesco Broccoli (10 sq. ft. per plant).

3608 Imperial Star (120 days) This delicious vegetable is now accessible to northern gardeners. One Vermont customer called growing artichokes the highlight of her 1996 season. We've seen good specimens at the Exhibition Hall at Common Ground Fair and at Hidden Valley Farm in Alna. Market gardener Alan LePage has had success with Imperial Star in Barre, VT, getting as many as eight fruits off a single plant. Most plants will bear more than one, with the majority of production coming in the cooler fall weather which they prefer to summer's full heat. Plants (both seedlings and mature) can tolerate light, but not hard frosts. *Caution: May not ripen in northernmost areas.* A=.5g, 75¢, ~10 seeds, B=*not available*, C=1g, $1.50, D=4g, $5.50, E=28g, $28.00.

CELERY & CELERIAC *Apium graveolens*

0.2 gram packet about 540 seeds, 0.4 gram packet about 1080 seeds, 75,000 seeds per oz. Tender, must be started indoors in March, 10-12 weeks before setting out. Slow growers require rich moist soil to survive.

3616 Afina Cutting Celery (60 days) Afina is notable for its sturdy dark green foliage with rich aroma and taste. It regenerates quickly after cutting. Dutch variety imparts the same flavor to stews and soups as conventional celery. And though its culture is the same, it is much hardier and easier to grow. Both its thin hollow stems and its leaves can be used fresh or dried. Grows up to 30" tall. A=.2g, 75¢, B=.4g, $1.25, C=1g, $2.25, D=4g, $2.50, E=28g, $6.00.

3624 Ventura Celery (80 days) *A. g.* var. *dulce* Presumably named for Ventura County, CA, where celery is the third leading cash crop. I always found celery difficult to grow until I tried Ventura. Develops beautiful thick crisp stalks with rich but never harsh flavor even in less than ideal conditions. Because it has some tolerance to fusarium, Ventura doesn't seem to get the punky centers which sometimes plague Utah. A=.2g, 75¢, B=.4g, $1.25, C=1g, $2.25, D=4g, $2.50, E=28g, $6.00.

3632 Par-Cel Cutting Celery (72 days) Five years ago market gardener Eva Sommaripa suggested that we carry this curly cutting celery which looks like parsley but tastes more like celery. We held off because we could not find a supplier. Now we are able to offer Sommaripa's own seed. In several outdoor trials we've found it a fussy germinator, so we recommend an indoor start. Although it withstands heat and drought, Par-Cel is remarkably cold-tolerant, lasting well into late fall. Tremendously vigorous once established—a half dozen plants would be sufficient even for the aficionado. Makes a terrific garnish, also adds a welcome zest to salads and soups when the leaves are young and tender. As they age they develop a strong flavor not for delicate palates so you may want to cut them back once the roots are well established. A=.2g, 75¢, ~400 seeds, B=.4g, $1.25, C=1g, $2.25. *Not available in larger sizes.*

3644 Diamante Celeriac (100 days) *A. g.* var. *rapaceum* F-1 hybrid. A classy celeriac with nicely sized roots that stand above the ground (for ease of harvest and cleaning), no hollow crown and very few offshoots. I have found that hybrids size up much more quickly than open-pollinated celeriacs. An early start indoors is essential for good yields. If you haven't yet been sufficiently venturesome to try celeriac, give Diamante's clean white internal coloration and superb eating quality a chance. A=.2g, 75¢, B=.4g, $1.25, C=1g, $2.25, D=4g, $9.00, E=28g, $60.00.

EGGPLANT *Solanum melongena*

.2 gram packet about 48 seeds, .4 gram packet about 96 seeds. Likes same growing conditions as peppers, but is even more of a challenge in our short season. The selections below are the most reliable producers we've found. We are looking for more, but in 1997 ripe fruits were sparse even among our highly skilled trialers.

3666 Swallow (51 days) F-1 hybrid. If past failure with this vegetable in our harsh climate has been a bitter pill to swallow, this Swallow might leave a better taste. Swallow is early, producing glossy purple-black tender fruit of the elongated (1¾x7") oriental type without the bitterness often associated with larger eggplants. Our best-selling eggplant; over 600 packets in 1997. A=.2g, 75¢, B=.4g, $1.25, C=1g, $3.00, D=4g, $8.50, E=28g, $45.00.

3674 Pingtung Long (58 days) F-1 hybrid. A long Chinese eggplant that will please cooks who enjoy the ease of working with uniform slices. Plants are vigorous, stress tolerant, and start producing early for a decent overall yield. If Pingtung is harvested before full maturity its light purple color is especially appealing. As it approaches its full 11" length, its skin will darken but retain a pleasing sheen. Has the taste to keep you coming back for more—an appealing sweetness without bitterness. A=.2g, 75¢, B=.4g, $1.25, C=1g, $2.25, D=4g, $3.90, E=28g, $18.00.

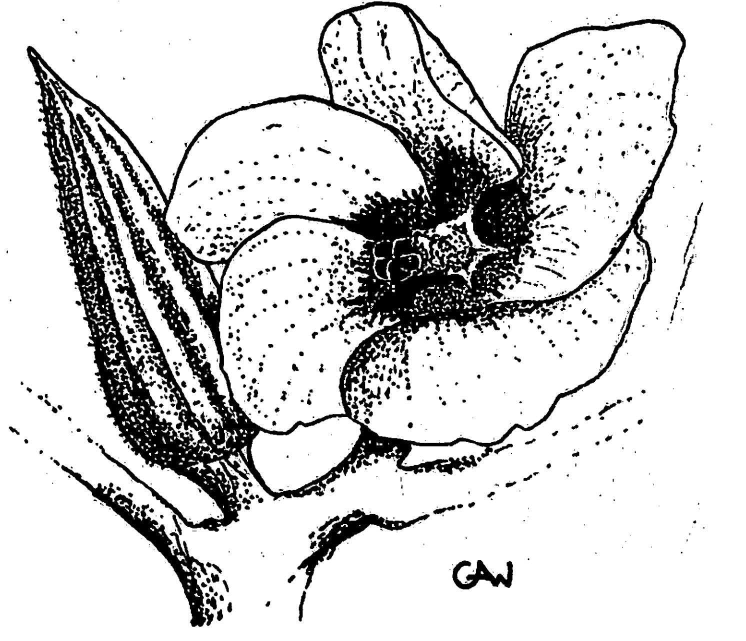
3682 Dusky (75 days) F-1 hybrid. A dependable hybrid for the North. Glossy black fruits medium-sized, oval-shaped, firm. Resistant to TMV. A=.2g, 75¢, B=.4g, $1.25, C=1g, $2.25, D=4g, $3.90, E=28g, $18.00.

3690 Rosa Bianca (88 days) Called by Vermont market grower Alan LePage "the best eggplant in the universe," with a creamy, pudding-like consistency and delicate flavor unmatched by any other variety. Gorgeous fruits, white with lavender streaking down the side, can command $3 a pound at markets. Quite different from those familiar slender black types, Rosa is plump, about 3-4" across and 5" long, narrow at the top and going down almost in folds like draped fabric. Fruits average 2 lb, max out at 4 lb, making it LePage's highest-yielding eggplant. Open-pollinated Rosa needs to be coddled, particularly in the northern half of New England. We recommend raised beds, row covers and plastic or IRT mulch. Italian heirloom. A=.2g, 75¢, B=.4g, $1.25, C=1g, $2.25, D=4g, $3.90, E=28g, $18.00.

OKRA *Abelmoschus esculentus*

2 gram packet contains about 30 seeds. Okra is very tender and requires a lot of heat. Direct seeding is very marginal in our climate. We recommend starting indoors in peat pots in warm (80°) temperatures and transplanting in 4-5 weeks, after all danger of frost has passed. Transplant 1' apart; do not disturb roots.

3696 Cajun Delight Okra (70 days) In our search for okra for our northern clime, earliness is of paramount importance. Our 1996 "endless spring" was not exactly conducive to growing this heat-lover. Yet, 1997 All-America winner Cajun Delight ripened with ease, ahead even of Annie Oakley II, and its tender dark angular pods kept on producing until frost. Yankees who think okra's appeal is confined to Southerners will be surprised to learn that we sold 700 packets last year, mostly to cold-climate gardeners. Those unexposed to this southern delicacy should try combining it with other ingredients in a gumbo or frying it. Add vinegar while it is cooking if you wish to rid it of its mucilaginous nature. A=2g, 75¢, B&C=*not available*, D=4g, $1.50, E=28g, $9.00.



OPEN-POLLINATED PEPPERS *Capsicum annuum*

Room temperature is *not* sufficient to germinate pepper seeds. They need 80s. Very tender, will not tolerate frost, dislike windy spots, will not set fruit in cold or extremely hot temperatures or in drought conditions. Start indoors March or April. Set out June. Black plastic highly recommended. Pick first green peppers when they reach full size to significantly increase total yield. Green peppers, though edible, are not ripe. Peppers ripen to red, yellow, orange, etc.

At GreenGenes Farm, Nikos specialized in growing market peppers, and she has made upgrading our pepper selection a major priority. In the past six years we have added twenty new peppers, including yellow, orange and purple bells.

Green and red peppers are among the vegetables with the fewest calories and the most vitamin C.

For all peppers, days to maturity are from transplanting date.

SWEET PEPPERS

3702 Greygo Baby (65 days) Wherever we encountered it in this year's trials, we agreed that this baby has taste. Even those not normally fond of peppers wanted more. Ripens clusters of early small 1$^1/2$x2" flattened tapered fruits of the sweet cherry type which combine a refreshing juicy sweetness with full-bodied pepper flavor. In Hungary the red peppers are traditionally stuffed with cabbage and then pickled. NEW! A=$^1/2$g, 50¢, B=1g, 95¢, C=2g, $1.50, D=4g, $2.60, E=28g, $17.00.

3703 Klari Baby Cheese (65 days) Also known as Golden Delicious Apple Pepper. From Hungary, a Fedco introduction. Cheese peppers are flattened, white when unripe, and filled with a soft core. Shaped like 3" Rouge Vif D'Étampes pumpkins, the squat 4 oz. fruits with mild and sweet cores were unlike anything we'd ever tried. I am not a wild-eyed pepper aficionado, but I couldn't stop eating these delicious summertime treats out of hand. Traditionally they are pickled whole after ripening from white to yellow to red. Named after the woman who has maintained this heirloom seed stock. A=$^1/2$g, 50¢, B=1g, 95¢, C=2g, $1.50, D=4g, $2.60, E=28g, $17.00.

3706 King of the North (70 days) Our most popular open-pollinated pepper. A good choice for those who want marketable blocky peppers but can't get Staddon's Select to set fruit. Offered by Burpee in 1955 for 15¢ a packet and $1.20 an ounce. A=$^1/2$g, 50¢, ~100 seeds, B=1g, 95¢, C=2g, $1.50, D=4g, $2.60, E=28g, $4.80.

3714 Boldog Hungarian Spice Sweet Paprika (71 days) This Boldog from Hungary has no bite. A prolific bearer of 6x4" 2-lobed pendant fruits which are picked red, and ground into sweet paprika or strung into decorative paprika ristras. These bright tapering fruits also make good fresh eating. Luckily, Boldog sets enough fruit to accomodate all three uses. A=$^1/2$g, 50¢, B=1g, 95¢, C=2g, $1.50, D=4g, $2.60, E=28g, $17.00.

3722 Purple Beauty (74 days) Became our first purple pepper in 1996. Produces a good yield of blocky 3x3" fruits which turn from green to purple to deep red as they mature. Purple fruits taste like other crisp green bells. Will turn green when cooked. Plants 18-20". A=$^1/2$g, 50¢, ~100 seeds, B=1g, 95¢, C=2g, $1.50, D=4g, $2.60, E=28g, $15.00.

3728 Staddon's Select (74 days) Early production of good-sized fruit in adverse conditions. Large, glossy, dark-green 3-4 lobed peppers on tall bushy plants. A good large blocky market-type pepper where fruits will set. *Caution: not adapted to northernmost areas.* A=$^1/2$g, 50¢, ~100 seeds, B=1g, 95¢, C=2g, $1.50, D=4g, $2.60, E=28g, $4.80.

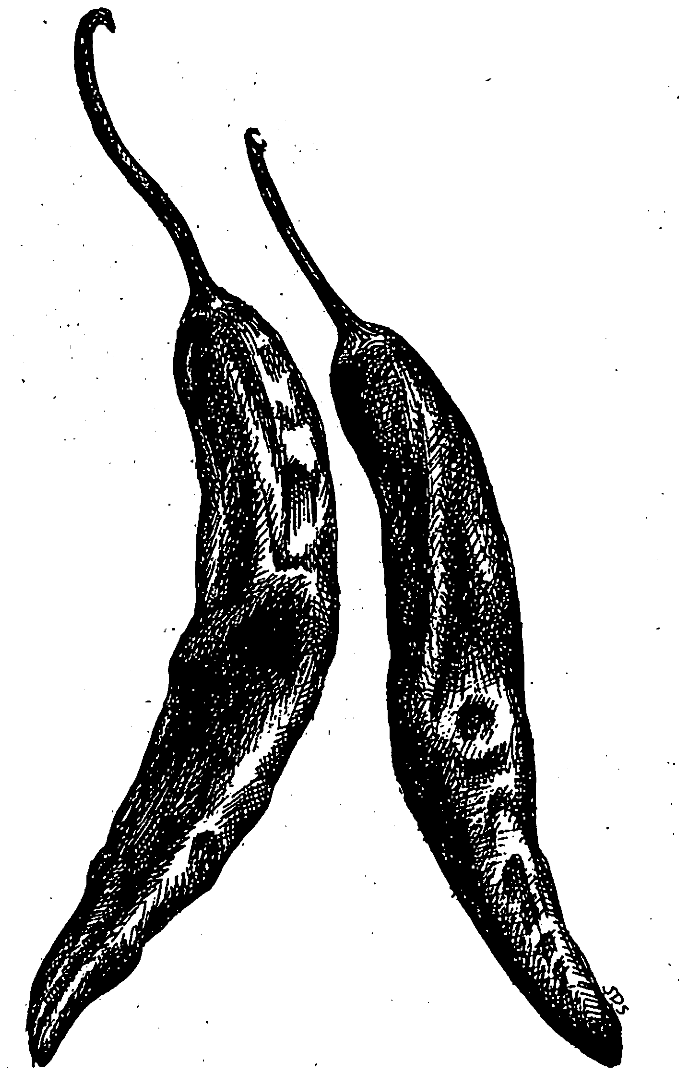
3738 Cubanelle (80 days) Our customers asked for this semi-sweet frying pepper. 6x2" waxy yellow-green fruits turn red. Not pungent. A=$^1/2$g, 50¢, ~82 seeds, B=1g, 95¢, C=2g, $1.50, D=4g, $2.60, E=28g, $4.80.

HOT PEPPERS

Popularity of hot peppers has increased dramatically in recent years, and per capita consumption of chiles in the US now exceeds that of peas, asparagus and cauliflower. Retail sales of salsas have surpassed those of catsup! Hot pepper eaters enjoy the "constrained risk" of a pleasant thrill which, unlike other addictive substances like alcohol, tobacco or coffee, has only a short-term effect and is not health-threatening! Capsaicin compounds cause most of the heat in peppers. Warm nighttime temperatures stimulate maximum development of capsaicins and increase pungency levels. Pungency is expressed in Scoville units, after Wilbur Scoville, an Englishman who devised the method used from the early 1900s until about 1980 to measure the heat in peppers. If you overdose on hot peppers, milk is almost twice as effective as water in banking the flames, and bread, rice or tortillas are even better. Roberta Bunker has taken up the banner for hot peppers, trialing 23 for us in 1995, 13 in 1996 and 23 in 1997, and raising seed crops for three at her Super Chilly Farm (so named for her love for chiles and the propensity of her grounds to catch all the early frosts).

3754 Hungarian Hot Wax (68 days) Numerous customers requested this semi-hot type. Yellow 5$^1/2$x1$^1/2$" fruits are smooth, waxy, tapering to a point. Sets even in cool weather. Originated in Hungary, 1941. 700 to 3,000 Scovilles. A=$^1/2$g, 50¢, ~82 seeds, B=1g, 95¢, C=2g, $1.50, D=4g, $2.60, E=28g, $4.80.

3756 Bulgarian Carrot Chile (68 days) Also known as Shipkas. We first saw this show-stopper at Amy LeBlanc's farm in 1996. Shaped and colored like a carrot, the florescent-orange thin-walled 1$^1/2$-3$^1/2$" fruits are as hot as they look, and will make welcome additions to chutneys, marinades and salsas, or excellent pickles. Although the plants grow just 18" tall, they produce clusters of peppers close to the main stem. Their fruity undertone nicely complements their heat. Brought indoors, plants produced in Amy's greenhouse till February. Heirloom was smuggled here through the Iron Curtain 20 years ago. Now you can make a Halloween sauce using Czech Blacks and Carrot Chiles! NEW! A=$^1/2$g, $1.00, B=1g, $2.00, C=2g, $3.50, D=4g, $6.00, E=28g, $30.00.



3764 Early Jalapeño (75 days) Hot, hot, 3x1" sausage-shaped blunt fruits mature early. Packing the seed makes us teary-eyed! 4,000 to 6,500 Scoville units at maturity. A=$^1/2$g, 50¢, ~100 seeds, B=1g, 95¢, C=2g, $1.50, D=4g, $2.60, E=28g, $4.80.

3770 Long Red Narrow Cayenne (75 days) Often curled and twisted, peppers grow 5-6" long, $^1/2$" across, and taper to a point. Dark green color changes to bright red. Prolific and hot. Pre-1827 heirloom. 3,500 to 5,000 Scovilles. A=$^1/2$g, 50¢, ~100 seeds, B=1g, 95¢, C=2g, $1.50, D=4g, $2.60, E=28g, $4.80.

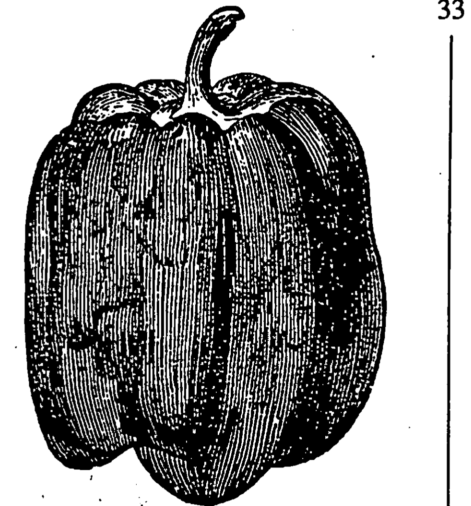
3778 Anaheim (78 days) Anaheim is the pepper used for chiles rellenos. 7" long fruits tapering to a point turn from dark-green to red at maturity. Pungent, but not particularly hot. 900 to 2,500 Scovilles. A=$^1/2$g, 50¢, ~100 seeds, B=1g, 95¢, C=2g, $1.50, D=4g, $2.60, E=28g, $4.80.

3792 Ancho 101 (85 days) Known as Ancho when dried, Poblano when used fresh, this Mexican favorite is wonderfully versatile. Uniform 4x2" thick-walled shiny dark green fruits mature into a deep red. Shaped like a pointed bell with 2 to 3 lobes, the peppers have little heat in the flesh, storing their mildly pungent flavor in their pith and seeds. A heavy cropper in hot climates, Ancho is not "peppered with peppers" in northerly climes like ours. Take care to start them early and protect the first blooms in order to equal or better their average yield here of four fruits per plant. 1,500-4,000 Scoville units. A=$^1/2$g, 50¢, B=1g, 95¢, C=2g, $1.50, D=4g, $2.60, E=28g, $4.80.

3796 Habanero (90 days) *C. frutescens* The name means "from Havana." Also known as Scotch Bonnet, Habanero is reputed to be the hottest pepper in cultivation, registering a blistering 200,000-350,000 Scoville units, depending on how hot the growing season, from 30-80 times as hot as an Early Jalapeño. Each 1$^1/2$' plant will set 10-20 pendulous fruits which turn from dark green to tangerine as they mature. Fruits are somewhat wrinkled from stem to tip, with a distinct flavor you will always recognize once you've tasted them. A key ingredient in West Indian jerk sauce. We recommend greenhouse culture for the northern two-thirds of our sales area where nighttime temperatures are almost always below 70°, making productivity outdoors extremely iffy. A=$^1/2$g, 50¢, B=1g, 95¢, C=2g, $1.50, D=4g, $2.60, E=28g, $12.50.

HYBRID AND MAINE-GROWN PEPPERS

HYBRID SWEET PEPPERS



3810 New Ace (60 days) A cinch to grow in the North. Resists blossom drop even in adverse weather so that almost every flower produces. Fruits light, not blocky, turn red early. Good home garden kind. New Ace is an improvement on the old strain, producing fewer misshapen pointy peppers, but still not a majority of classic blocky 4-lobed commercial peppers. A=.2g, 95¢, ~40 seeds, B=.4g, $1.70, C=1g, $3.60, D=2g, $7.00, E=4g, $12.50; 1oz @$72.00.

3815 Fat 'n Sassy (63 days) You say you like yours thin and docile, and you don't take no sass? Well, bessy you guess again if you want huge peppers, you want 'em early, and you want a lot of 'em. Peto ought to have called this one "Bold 'n Blocky" because it'll just knock you over with its massive fruit set. They come early, they come often, they come big (4$^1/2$x4$^1/2$"), they come blocky, they come sweet, they come thick-walled. You wouldn't believe a 2' plant could carry such a load, so don't you sass me till you see it for yourself. Widely adapted. Ripen green to red. TMV and PY tolerant. NEW! A=.2g, 95¢, B=.4g, $1.70, C=1g, $3.60, D=2g, $7.00, E=4g, $12.50; 1oz @$70.00.

3820 North Star (65 days) Early productive sweet pepper sets a high percentage of blocky medium-sized thick-walled green fruits ripening to red. North Star has sufficient foliage cover to prevent sunburn. If you're ready to try for a red pepper that's a little classier than Ace, choose North Star. TMV resistant. A=.2g, 95¢, ~33 seeds, B=.4g, $1.70, C=1g, $3.60, D=2g, $7.00, E=4g, $12.50; 1oz @$75.00.

3828 Banana Supreme (68 days) Banana peppers are the sweet complement to Hungarian Hot Wax Peppers. You'll want clear labels *and* demarcations in your garden if you plant both since they look alike but definitely taste different. Color develops from green-yellow to yellow to red with advancing ripeness. For its disease resistance, prolific production, and large 7-8" fruits, Supreme was the best banana pepper in Nikos' impressive 1992 trials. A=.2g, 95¢, B=.4g, $1.70, C=1g, $3.60, D=2g, $7.00, E=4g, $12.50; 1oz @$70.00.

3834 Spanish Spice (70 days) Despite its name, this one's not spicy at all. It is instead an outstanding Italian frying pepper—thin-walled and tapering with a deliciously rich flavor. Moreover, the plants are sturdy, keeping the large 7" fruits off the ground (a frequent failing of other fryers). Provides lots of green peppers and even a few red ones if you have either skill or luck. Resistant to TMV. A=.2g, 95¢, B=.4g, $1.70, C=1g, $3.60, D=2g, $7.00, E=4g, $12.50; 1oz @$56.00.

HOT PEPPERS

3852 Hot Portugal (64 days) Open-pollinated. Bears elongated narrow fruits, 5-8" long, 1" in diameter with the classic wrinkled hip at the stem end. Superb pepper flavor comes through its considerable heat nicely. Not as hot as Super Chili, but hotter than Early Jalapeño. Early, productive ripener of glossy scarlet fruits borne on tall plants. A favorite of Roberta Bunker who grew the seed without using pesticides, herbicides or chemical fertilizers. A=.2g, 95¢, ~33 seeds, B=.4g, $1.70, C=1g, $3.60, D=2g, $7.00, E=4g, $12.50.

3854 Dacia Fire (65 days) F-1 hybrid. Dacia's light yellow 5-8" fruits turn fiery orange-scarlet when they ripen, accurately foretelling the considerable heat they can offer. Hotter than jalapeno and probably on a par with Hot Portugal, very early for its size and eminently marketable. Tapering to a blunt end like Hungarian Hot Wax, at least half will exceed 6". Roberta got good production, about a dozen Romanian-type fruits, from each 2$^1/2$' plant. A=.2g, 95¢, B=.4g, $1.70, C=1g, $3.60, D=2g, $7.00, E=4g, $12.50.

3856 Czech Black (65 days) Open-pollinated heirloom. When they first gaze upon these fruits, people say, "Wow! These don't even look real," reports seed grower Roberta Bunker. Black when immature, the 2$^1/2$" long conical fruits ripen to a lustrous garnet—so beautiful that Roberta kept a bowl on her table just to admire. Mild juicy flesh runs with a cherry red juice when cut. The heat, a tad less than a jalapeño's, is in the ribs and seeds. 2$^1/2$ to 3' bushes bear very early, setting about 20 pointed thick-walled peppers per plant. A=.2g, 95¢, B=.4g, $1.70, C=1g, $3.60, D=2g, $7.00, E=4g, $12.50.

3862 Mexibell (70 days) F-1 hybrid. A 1988 All-American winner, Mexibell is shaped like a bell pepper, but unlike other bells, it has some heat, especially in its ribs. Will make a good dish of Mexican hot stuffed peppers, or a surprise at the crudité table. 2,500 Scoville units. Mexibell fans will be pleased to know that sales, although still not robust, have increased six consecutive years. A=.2g, 95¢, B=.4g, $1.70, C=1g, $3.60, D=2g, $7.00, E=4g, $12.50.

3872 Garden Salsa (73 days) F-1 hybrid. If the thought of ingesting habanero makes you wince, Garden Salsa may be more your style. Bred for those who complain that other salsa varieties are too hot, Garden Salsa's full-bodied sweet pepper flavor comes through without being drowned by capsaicin overload. A great cooking pepper, its fruits provide plenty of kick in homemade salsas. Large plants bear up to a dozen beautiful glossy tapered 8" fruits that ripen to red, but are often harvested in the green stage for making salsa. A consistent performer during three years of trials, often bearing under difficult conditions when others balked. 2,500-3,500 Scovilles. Resistant to TMV. A=.2g, 95¢, ~20 seeds, B=.4g, $1.70, C=1g, $3.60, D=2g, $7.00, E=4g, $12.50; 1oz @$70.00.

3880 Super Chili (75 days) F-1 hybrid. I still haven't forgotten this one at our 1990 pepper taste test at Jeanne Griffin's. I required a lot of milk to bank the lingering fires! It was the hottest of all the varieties we tried and ranks 4th on Petoseed's hot 20 with 40,000-50,000 Scoville units. The plants, covered with dozens of green and red 2x$^1/2$" pointy peppers, are highly ornamental. Bears prolifically whether summers are wet or dry, hot or cold. 1988 AAS. A=.2g, 95¢, ~28 seeds, B=.4g, $1.70, C=1g, $3.60, D=2g, $7.00, E=4g, $12.50; 1oz @$70.00.

3894 Thai Hot (82 days) Open-pollinated. Believe it or not, this one is grown "in the trade" as a red and green Christmas potted plant. However, devoted followers of hot cuisine prize the sparks it creates. Early pinching will produce a bushy 8" plant that can be pulled, roots and all, and hung to dry for winter use. Or grow it inside in a basket for both ornamental and edible enjoyment. Seed grown in Maine by Roberta Bunker. A=.2g, 95¢, ~66 seeds, B=.4g, $1.70, C=1g, $3.60, D=2g, $7.00, E=4g, $12.50.

3897 Some Like it Hot Mix (64-85 days) Love hot peppers but lack the space to try separate packets of each? Our blend of seed for 5-7 different kinds all in one packet is just for you. We'll mix colors, shapes and flavors. NEW! A=.2g, 95¢, B=.4g, $1.70, C=1g, $3.60, D=2g, $7.00, E=4g, $12.50; 1oz @$70.00.

FANCY HYBRID SWEET PEPPERS

3906 Turino (68 days)
Red roaster, red roaster you sure have it all.
Red pendant massed peppers; it's not even fall.
Red roaster, red roaster they say you're so sweet.
Over six inches long, delicious, no heat.
Red roaster, red roaster you have such thick walls.
They surely won't crumble, not even in squalls.
Red roaster, Turino you're ripe 'fore full color.
I prefer you deep red, but you're tasty when duller.
Red roaster, Italian not shaped like a bell.
Square bottoms, then tapered, but oh, what the ____!
Red roaster, red roaster you're great for the North!
Which is why we so proudly do now bring you forth! NEW!
A=.1g, 95¢, B=.2g, $1.70, C=.4g, $3.60, D=1g, $7.00, E=2g, $12.50.

3910 Elisa (70 days) Nikos searched years for a pepper to replace Ringer and this one might be a "dead ringer." Early maturity, tolerance to cool conditions, and big beautiful fruit ranging from deep blocky green to elongated red made this a standout in 1993's extensive trials. Resistant to PY, TEV and TMV. Tolerant to stip. A=.1g, 95¢, B=.2g, $1.70, C=.4g, $3.60, D=1g, $7.00, E=2g, $12.50; 7g, $37.50.

3930 Valencia (72 days) Its impressive rich orange fruit at maturity will turn heads at potlucks, markets or fair exhibition halls. Valencia bears four-lobed, blocky, 4x4" fruit on plants with good foliage cover. Resistant to TMV and tolerant to stip. A=.1g, 95¢, ~11 seeds, B=.2g, $1.70, C=.4g, $3.60, D=1g, $7.00, E=2g, $12.50; 7g, $37.50

3940 Vidi (72 days) From M. Schultz in Washington to Ken Fine in Maine, Vilmorin's Vidi received raves from coast to coast. Schultz rated it tops among over 30 varieties in her trial, reporting 33 huge peppers on one bush! Market grower Fine called it "big, beautiful, real blocky, and kind of long in the European style." Fills the need for an early marketable bell pepper which will reliably turn intense red without deformities. Resistant to TMV, TEV and PY. A=.1g, 95¢, ~12 seeds, B=.2g, $1.70, C=.4g, $3.60, D=1g, $7.00, E=2g, $12.50; 7g, $37.50.

3960 Orobelle (74 days) If you like colored peppers you'll love Orobelle's golden sweet thick-walled blocky fruit. Its early setting ability under cool conditions and its good fruit coverage have made Orobelle a standard. Grower is discontinuing production. *This is the last year we'll be offering Orobelle.* Resistant to PY, TMV and stip. A=.1g, 95¢, B=.2g, $1.70, C=.4g, $3.60, D=1g, $7.00. *Not available in larger sizes.*

3970 Portos (74 days) Also known as Hybrid 860. Who names these varieties, anyway? They couldn't have come up with a less appealing name, but don't be fooled, this is one great pepper! Portos was the star of our 1993 trials, but it took us a couple years to find untreated seed. Eureka! we have it now, and you need it if you are looking for a prolific producer of high quality 4-lobed green bell fruits which turn brilliant yellow at full maturity. Its strong plant cover, yield potential, blocky shape and very thick walls make Portos a standout. A=.1g, 95¢, ~11 seeds, B=.2g, $1.70, C=.4g, $3.60, D=1g, $7.00, E=2g, $12.50; 7g, $37.50.

3976 Paprika Fire (65 days) Also known as Sugarchile. Exceptionally good for eating out of hand and great for roasting over the grill, Paprika Fire is more traditionally used for drying to make hot paprika or chili powder. Its very sweet flavorful red flesh and mildly hot ribs combine to create a delightfully complex and mildly addictive taste sensation. Medium-sized strong plants yield heavy sets of tapering, pointy 1$^1/2$x5" fruit with thick walls. NEW! A=.1g, 95¢, B=.2g, $1.70, C=.4g, $3.60, D=1g, $7.00, E=2g, $12.50; 7g, $37.50.

TOMATOES *Lycopersicon esculentum*

9,000 seeds per oz. Tender, cannot tolerate frost. Must be started indoors Feb.-Apr. Require warm temperatures to germinate. Avoid using hot manure as it causes lush foliage with few ripe fruits. Instead use generous amounts of well-rotted compost or cow or horse manure to boost plant vigor and yields. Heavy phosphorus needs. Respond well to foliar sprays. Determinate (det) bush varieties may be staked, normally should not be pruned. Indeterminate (ind) climbing varieties are customarily staked and pruned. Caging without pruning delays ripening, reduces fruit size but increases production, prevents sunburn and reduces fruit cracking and rotting. Staking and pruning produces earlier larger fruits. One reason not to stake or prune (besides sheer laziness!) is that foliage will give fruits some protection against light September frosts. Large-fruited varieties with low fruit set and high sugar content are most prone to crack. To reduce cracking: avoid heavy watering, large fluctuations in day/night temperatures and maintain adequate calcium levels in your soil. Research at Harvard University suggests that men who eat at least ten servings per week of tomatoes sharply reduce their risk of prostate cancer and women who consume 2-4 or more servings reduce their risk of breast cancer. Consumption of raw tomatoes is linked to reduced cancers of the esophagus, colon and rectum.

We place a heavy emphasis on diversity in our tomato trials. In 1996, Roberta Bunker, Alison LaCourse, David Felch and I grew more than 110 different varieties with many repetitions. Again in 1997 I grew over 100 kinds. Our research has brought eight additional varieties to our 1998 lineup. The rich cultural heritage of the many colorful heirlooms speaks for itself. Who could fail to be enchanted with names like Cherokee Purple, Dad's Mug, Box Car Willie, Radiator Charlie's Mortgage Lifter, Prize of the Trials, Dad's Barber, Snowball and Stump of the World? Heirloom tomatoes are entering the mainstream: The New York *Times* featured them in the lead article of its Living Section on Aug. 20.

If you insist on unblemished, perfectly round, red tomatoes you're missing out on a rich diversity of shapes, colors, textures and complex subtle flavors. Music teacher and tomato fanatic Amy LeBlanc says that "yellow tomatoes have bad press comparable to and as undeserved as that of viola players in the orchestra." The DiMare Company, one of North America's largest fresh market tomato growers (over 17,000 acres), says that is changing. Yellow tomatoes are becoming staple in the trendier stores and even reaching into mainstream markets. Striped tomatoes may be next.

We select heirloom varieties to amaze and delight home gardeners, but an increasing number of market growers are now testing heirlooms' commercial potential. We suggest offering prospective customers free samples.

For all tomatoes days to maturity are from date of transplanting.

See also **#6866-6874**.

PHYSALIS

4008 Husk Cherry (77 days) *P. pruinosa* Also known as Ground Cherry. Same genus as Chinese Lantern and tomatillo, bearing fruits which ripen inside their protective husks. As clusters of berries sweeten, they turn from green to golden yellow. Often they will drop off the decorative branching plants before full maturity and reach perfection as their husks thin to a near-gossamer papery consistency. The berries have an indescribable nutty flavor that kids love for raw snacks. Grown-up kids will often go back for more, too. Culture like tomatoes, transplanting after last spring frost. Husk cherries will tolerate a touch of frost but give up when temperatures dip below 30°. In a good year, about half will ripen in time. Will readily self sow, although volunteers never mature as quickly as those started indoors. Seed grown in Vermont without pesticides, herbicides or chemical fertilizers. A=½g, 75¢, B=1g, $1.25, C=2g, $2.25, D=4g, $3.90. *Not available in larger sizes.*

4014 Toma Verde Tomatillo (77 days) *P. ixocarpa* Large-fruited uniform strain. Golf ball-size green fruits encased in papery husks are harvested for making salsa when paper splits. They can be eaten raw for a tangy, nutty taste if allowed to turn slightly yellow, but will split before becoming fully yellow. Don't use yellow tomatilloes in salsa. Heirloom. A=½g, 75¢, B=1g, $1.25, C=2g, $2.25, D=4g, $3.90, E=28g, $6.00.

OPEN-POLLINATED TOMATOES

4024 Oregon Spring (58 days) Det. Recommended as a "hedge" in northern climates for cold summers like 1986, 1992 and 1996. When most other varieties fail to ripen in time, Oregon Spring matures good-sized fruit in August, actually seeming to perform best during cool summers. Develops more cosmetic defects in the heat and humidity. Bears succulent almost seedless fruits of Russian parentage, up to 4" but somewhat variable. Unusually good tasting for such an early variety. Bred and developed by Dr. James R. Baggett of Oregon State University. Potato-leaf foliage. Not suitable for market growers. Resistant to V. A=½g, 75¢, ~250 seeds, B=1g, $1.25, C=2g, $2.25, D=4g, $3.90, E=28g, $14.00.

4032 Ida Gold (59 days) Det. Often these delightful orange 2-bite low-acid fruits are the first tomatoes to ripen for us. They are early and prolific even in bad tomato years. Developed specially for the North by the University of Idaho. An indifferent performer in so-so soil, but a bountiful yielder when fed compost and rotted manure. A=½g, 75¢, B=1g, $1.25, C=2g, $2.25, D=4g, $3.90, E=28g, $10.00.

4044 German Johnson (70 days) Ind. A large pink Pennsylvania Dutch heirloom which surprised us with its rich tomato flavor in our 1994 trial. Very uniform and attractive for an heirloom variety, the 12-24 oz. slightly oblate low-acid fruits start ripening early and keep coming steadily. German Johnson's interplay of subtle flavors makes for a robust tomato-ey taste. Johnson is one of the four parents of heirloom Mortgage Lifter, a larger pink variety which performed well in our 1993 trial. Mortgage Lifter tastes good; German Johnson is even better. A=½g, 75¢, B=1g, $1.25, C=2g, $2.25, D=4g, $3.90, E=28g, $14.00.

4048 Pruden's Purple (72 days) Ind. We usually cooperate well at Fedco and tolerate each others' peculiarities *except* during tomato taste tests. When we compare tomatoes, a subject about which we are all impassioned, tolerance evaporates and remarks are made about "people who have no taste buds", who "eat yellow tomatoes" and who "put sugar in their sauce." CR thinks you don't need Pruden's if you have Brandywine. Susan and David like Brandywine fine but think Pruden's tastes better and ripens three weeks earlier. Opinions aside, Pruden's is early for its size, and makes a great sandwich tomato. Its vigorous potato-leaf vines yield spreading irregular pink 1 lb. fruit with very few seeds, a silken texture and rich tomato taste, nicely tart with a balanced undertone of sweetness that is neither insipid nor cloying. (Susan suggests we get a 900 number where you can call up and vote for the best tomato of all time. Dial 1 for Brandywine, 2 for Pruden's, 3 for Aunt Ruby's or 4 for Cosmonaut Volkov!) NEW! A=½g, 75¢, B=1g, $1.25, C=2g, $2.25, D=4g, $3.90, E=28g, $14.00.

4054 Bonny Best (75 days) Ind. Also known as John Baer, developed in 1908 at the Bonny Plant Farm in Union Springs, AL. Always one of the richest tasting in our trials, this old-time canning variety is also fine for the home garden. Too prone to catfacing for market growers and too soft to stand much handling, but great for eating whole right in the garden. A=½g, 75¢, B=1g, $1.25, C=2g, $2.25, D=4g, $3.90, E=28g, $6.00.

James Baggett

For over forty years Dr. James Baggett has been breeding vegetables for improved quality, yield and disease resistance, with special emphasis on adaptation to western Oregon and the Pacific Northwest. His varieties have turned out to be top performers in our part of the country as well. We have sold at least a half dozen of them, and currently offer four.

Remarkably for this transient era, Baggett, a native of Idaho, has spent his entire career at Oregon State University, since receiving his doctorate there in 1956. Probably most noted for his peas and snow peas, he has also worked with green beans, lettuce, squash, tomatoes, broccoli and cabbage. His credits include Sugar Loaf delicata squash, **#2797 Summertime**, a slow bolting heat resistant head lettuce, a number of particularly early parthenocarpic tomatoes especially suitable for cold areas, and several bush beans with delicious Blue Lake flavor widely grown in Oregon but not so well known elsewhere. He figures his most important cultivars in terms of acreage grown and economic impact are Oregon 91G bush bean and **#826 Oregon Sugar Pod II** snow pea. Although he concentrates on breeding crops for processing which meet the greatest economic need, Baggett has never neglected home gardeners and small commercial growers.

His **#4024 Oregon Spring Tomato**, which ripens good-sized fruit in even the worst growing years, has been the salvation of many a Maine gardener. We've also enjoyed his mostly seedless Santiam and Siletz tomatoes and his Gold Nugget cherry tomatoes. Eric Sideman, MOFGA Research Director, highly recommends Siletz for growers seeking early good-looking fruit to take to farmers markets.

His Oregon Trail bush bean was one of the best I've ever tasted. It didn't last long on the Fedco list because of slow sales, but probably merits reintroduction.

His OSU II snow pea was bred for powdery mildew resistance. Our 1997 introduction **#818 Oregon Giant** was part of a continuous 43 year program to breed cultivars resistant to pea enation mosaic virus.

4064 Green Zebra (80 days) Ind. Amy LeBlanc, who offered seedlings for 115 different varieties this spring, called it "a wonderful surprise for us in 1996." A most unusual beast in the tomato menagerie, this zebra starts out green with dark green stripes, softening and blushing yellow when it ripens. It might have remained a mere curiosity, but for its scrumptious sweet rich flavor. 4-5 oz. small-medium fruits are emerald green inside. Perfect exteriors don't crack, hold up under adverse conditions and are strikingly different. Could be a hit with your kids or on your stand. A=½g, 75¢, ~165 seeds, B=1g, $1.25, C=2g, $2.25, D=4g, $3.90, E=28g, $14.00.

4068 Pineapple (85 days) Ind. The striped tomatoes are among my favorites. They have such great names as Hillbilly, Mr. Stripey-Tigerella, Georgia Streak and Pineapple, silky smooth textures and complex, fruity tastes. They tend to be a little funky cosmetically and often grow huge, 1 lb. or more. Pineapple, Amy LeBlanc's favorite salad tomato, is certainly characteristic—and may be the best of the genre. Cut in half, it looks like the interior of a pineapple except with yellow and red marbling. It doesn't taste like a pineapple, though, and not like a typical red tomato, either. Its unique mild low-acid fruity sweetness needs a fruit name all its own. But until I can invent it, I'll just call it the most beautiful tomato of all—at least from the inside. Potato leaf foliage. The original seed stock came from Martha Gottlieb. NEW! A=½g, 75¢, B=1g, $1.25, C=2g, $2.25, D=4g, $3.90, E=28g, $14.00.

4070 Tiffen Mennonite (86 days) Ind. Here's the Mennonite counterpart to the Amish Brandywine. Indeed Tiffen has many similarities to its more famous counterpart—potato-leaf foliage, pink skin, and rich, rich old-fashioned tomato taste which has drawn raves in each of our last two tastings at staff annual meetings. The large rough oblate beefsteak fruits (avg. 15 oz.) are a tad bigger and later than Brandywine. For a superb sandwich tomato or a fresh garden snack, heirloom Tiffen is hard to top! A=½g, 75¢, B=1g, $1.25, C=2g, $2.25, D=4g, $3.90, E=28g, $14.00.

4082 Gardener's Delight Cherry (68 days) Ind. Gardener's Delight often ripens just when Whippersnapper is through. Its larger size, deep red color and rich sweet flavor also contrast with Whippersnapper. The large plants need staking and will bear till frost. The fruits are so wonderful that I can overlook their annoying tendency to crack. A=½g, 75¢, ~250 seeds, B=1g, $1.25, C=2g, $2.25, D=4g, $3.90, E=28g, $14.00.

4090 Principe Borghese Cherry (75 days) Vigorous det. Bears small fruits in prolific clusters over a long season. An Italian variety of excellent flavor used for sun-dried tomatoes as it has few seeds and little juice. In our humid climate, you will need a solar dryer or a 100° oven to dry the fruits successfully. Also makes a tasty sauce, although you'll need a lot of the little tomatoes! CSA grower Jill Agnew lauds them for holding their perfect shape so well without cracking. A=½g, 75¢, ~330 seeds, B=1g, $1.25, C=2g, $2.25, D=4g, $3.90, E=28g, $14.00.

4096 Yellow Plum (72 days) Ind. We've nibbled on these meaty little gems for years. Unlike the pear types, they don't crack or succumb easily to disease. Heirloom offered by Indiana seedsman Hirschy for a nickel a packet in 1890. A=½g, 75¢, B=1g, $1.25, C=2g, $2.25, D=4g, $3.90, E=28g, $6.00.

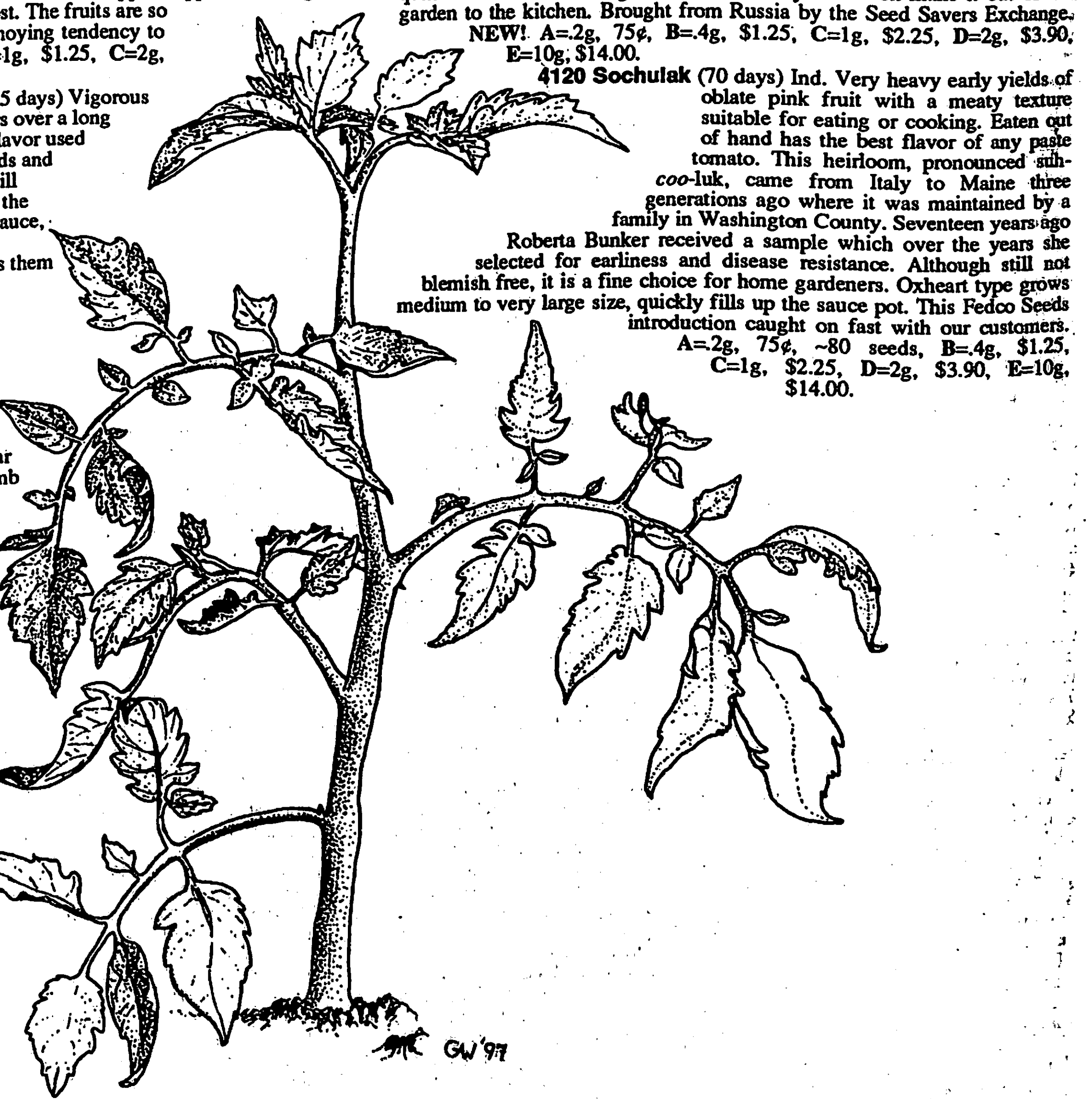
MAINE-GROWN TOMATOES

Take the leap and reward yourself with some new tomato experiences! All the seed in this section was grown by Fedco staff and trial growers without the use of pesticides, herbicides or chemical fertilizers. Those who have admired the tomato diversity displays at our Common Ground Fair booth have seen a sampling of our work as well as a sneak preview of where we're headed. That display, along with our apple and potato variety displays, earned us a ribbon at the 1995 Common Ground Fair for the most educational booth in the agriculture area.

4106 Glacier (56 days) Det. The Canadian seed company which used to supply us with this popular early small tomato disappeared! So we took control of our own seed production. Glacier ripens around the same time as the sub-arctics with about the same size, and almost no cosmetic defects except yellow shoulders, but there the comparisons end. Glacier's rich tomato flavor relegates the insipid sub-arctics to the compost pile. It is also far superior to the highly touted Siberia tomato, to Stupice, to Early Temptation and, in fact, to every other tomato in the same class that we've tried. Susan MacLeod, in the NOFA-NH News, agrees: Glacier tomatoes are "early ripening and the best flavor I've come across yet." A=.2g, 75¢, ~65 seeds, B=.4g, $1.25, C=1g, $2.25, D=2g, $3.90, E=10g, $14.00.

4112 Cosmonaut Volkov (65 days) Ind. How good is Cosmonaut Volkov? While growing more than 100 different tomatoes in each of the past three years, I've consumed thousands of fruits. One Cosmonaut Volkov in Alison LaCourse's 1995 garden was by far the best tomato I've ever eaten. The ones at the 1996 Shooting Star Farm trial were almost as good. How early is Volkov? Of the first fourteen full-sized ripe tomatoes harvested on or before Aug. 24 in our cold 1996 season, seven came from the two Cosmonauts. The other seven were scattered among three score other full-sized varieties in the trial. What makes Cosmonaut so special? In a word, the juice. Sweet, rich, full-bodied from deep red 8-12 oz. globes. The fruits look good, too, giving Cosmonaut possibilities as a market tomato. Cosmonaut, named for the Russian explorer who fell through space, is the quintessential fresh-eating tomato. Not many will even make it out of the garden to the kitchen. Brought from Russia by the Seed Savers Exchange. NEW! A=.2g, 75¢, B=.4g, $1.25, C=1g, $2.25, D=2g, $3.90, E=10g, $14.00.

4120 Sochulak (70 days) Ind. Very heavy early yields of oblate pink fruit with a meaty texture suitable for eating or cooking. Eaten out of hand has the best flavor of any paste tomato. This heirloom, pronounced suh-*coo*-luk, came from Italy to Maine three generations ago where it was maintained by a family in Washington County. Seventeen years ago Roberta Bunker received a sample which over the years she selected for earliness and disease resistance. Although still not blemish free, it is a fine choice for home gardeners. Oxheart type grows medium to very large size, quickly fills up the sauce pot. This Fedco Seeds introduction caught on fast with our customers. A=.2g, 75¢, ~80 seeds, B=.4g, $1.25, C=1g, $2.25, D=2g, $3.90, E=10g, $14.00.



4126 Garden Peach (71 days) Ind. Sweet! That's the initial reaction of virtually everyone tasting Garden Peach. The sensation of my 1993 tomato trials, this pre-1890 heirloom is well named. Its small 2 oz. fruits blush pink when ripe and have fuzzy skins somewhat like peaches. Relatively early, prolific, soft-skinned, juicy. They also keep a long time off the vine. A=.2g, 75¢, ~100 seeds, B=.4g, $1.25, C=1g, $2.25, D=2g, $3.90, E=10g, $14.00.

4148 Black Krim (80 days) Ind. If you think a tomato should be round, red and cosmetically perfect, steer clear! Black Krim scales the heights and wallows in the depths: at its best a striking iridescent purple, at its worst a hunk of road-kill. Most Black Krims have dark green-black shoulders with pronounced catfacing. Interiors are part black, too, with an unusual juicy yet meaty taste and texture. They taste best when they are dead ripe, which means blackish-red on the bottom and so soft one can hardly get them from garden to table intact! Throw away all your preconceptions and prepare for an adventure! Black Krim is a wonderful example of just how diverse the tomato can be. Heirloom from Krymsk on the Black Sea in Russia. Our original seed stock came from Martha Gottlieb, the avid seed saver who coordinates the Exhibition Hall at Common Ground Fair. A=.2g, 75¢, ~65 seeds, B=.4g, $1.25, C=1g, $2.25, D=2g, $3.90, E=10g, $14.00.

4150 Soldacki (80 days) Ind. You won't find a better sandwich tomato than Soldacki, a heavy producer of meaty, tasty 14 oz. pink globes with a good mix of sweetness, tartness and real tomato flavor. Tall, vigorous potato-leaf vines. Originally from Krakow, Poland, brought to Cleveland, OH, around 1900, then to Albany, NY. One of Nikos' favorites. Prone to cracking in wet seasons. NEW! A=.2g, 75¢, B=.4g, $1.25, C=1g, $2.25, D=2g, $3.90, E=10g, $14.00.

4155 Brandywine (82 days) Ind. with potato-leaf foliage. Five years ago when we became one of the first seed companies to reintroduce Brandywine we sold just 209 packets. Back then few people remembered how good a tomato could be. Many have since rediscovered the joys of heirloom tomatoes by biting into a Brandywine. Now deservedly famous (our sales have quintupled) this 113-year old Amish heirloom with a hint of tartness and a dollop of good old-fashioned tomato flavor is at the leading edge of the heirloom revival. Although fruits ripen unevenly throughout the season, at least a few will be quite early for such a large tomato. Arguably it is the best-tasting pink or red tomato. Tomato collector Ben Quisenberry thought so and so do I. Had the biggest 1994 sales increase of any variety on our list, and then further healthy jumps each of the past three years to surpass 1,000 packets in 1997. We just can't keep it in stock, and actually turned down a request from Burpee for a half pound of seed in Feb '95. Ironically, Petoseed, which bills itself as "the hybrid vegetable seed company" and has previously made unfavorable comparisons between its hybrid Big Beef and Brandywine, has been forced by growing demand to resume production of Brandywine. Our seed organically grown by Alison LaCourse. A=.2g, 75¢, ~100 seeds, B=.4g, $1.25, C=1g, $2.25, D=2g, $3.90, E=10g, $14.00.

4163 Aunt Ruby's German Green (85 days) Ind. If you think green tomatoes are good only for mincemeat, your first taste of Aunt Ruby's will change your opinion forever. One fan described it as "a phenomenal conversation piece whose tangy bright green gel tastes even better than the conversation it makes." Oblate 12-16 oz. fruits blush lightly yellow and develop an amber-pink tinge on the blossom end when ripe. The green flesh of this beefsteak is faintly marbled with pink. Flavor sweet and tart, rich and spicy. Created a sensation at our staff taste-testing in September, 1996, where it was rated "good" or "excellent" by all who tried it, ranking behind only Brandywine. Aunt Ruby's is not just the best green tomato, it is one of the best of any color. From Ruby Arnold of Greenville, TN. NEW! A=.2g, 75¢, B=.4g, $1.25, C=1g, $2.25, D=2g, $3.90, E=10g, $14.00.

4167 Schimmeig Striped Hollow (85 days) We are indebted to Joe and Bobbi Cavanaugh, avid seed savers and founders of the Garden State Heirloom Seed Society, for this spectacularly beautiful stuffing tomato. Shaped somewhat like tri-lobed bell peppers, fruits red with gorgeous gold streaking, mostly hollow interiors. Once it gets going, Schimmeig cranks out a plethora of 2½-5 oz. fruits. Unlike the "cardboard" walls of other stuffers we've tried, Schimmeig has some taste. Originally from Germany. NEW! A=.2g, 75¢, B=.4g, $1.25, C=1g, $2.25, D=2g, $3.90, E=10g, $14.00.

4168 Goldie (90 days) Ind. I welcome back Goldie, the best orange open-pollinated tomato I've yet tasted. Once again we have the original strain which so impressed in our 1994 and 1995 trials by delivering its rich flavor with an extraordinary velvety texture. Deep orange beefsteak fruits with a little red streaking on the bottom average 16-20 oz. Heirloom dates from the 1870s. Under cold and/or excessively wet conditions prone to catfacing which detracts from its superb texture. BACK! A=.2g, 75¢, B=.4g, $1.25, C=1g, $2.25, D=2g, $3.90, E=10g, $14.00.

4170 Ruby Gold (90 days) Ind. Meet Ruby Gold, our first striped tomato, as aesthetically appealing as it is delicious. Its prolific beautiful huge yellow fruits streaked with red and marbled interior flesh stole the show in our 1994 heirloom taste test. No wonder famed tomato aficionado Ben Quisenberry included Ruby Gold in his collection. Ours grew to 14 oz., but the mice didn't leave a single one unscathed. They know a good one. Fruits somewhat prone to crack and not always cosmetically perfect. Seed organically grown by Alison LaCourse. A=.2g, 75¢, ~100 seeds, B=.4g, $1.25, C=1g, $2.25, D=2g, $3.90, E=10g, $14.00.

4175 Whippersnapper Cherry (52 days) Det. No other cherry tomato is quite like Whippersnapper. Its pinkish-red tart fruits ripen earlier than any other cherries. Not disease resistant, it should be followed by a later sweeter more vigorous variety. A=.2g, 75¢, ~130 seeds, B=.4g, $1.25, C=1g, $2.25, D=2g, $3.90, E=10g, $14.00.

4177 Ciudad Victoria (64 days) *L. e.* var. *pimpinellifolium* Ind. Frankly, the recent rage for currant tomatoes left me cold. All the ones I tried were tiny, bland and cracked at the drop of a dewdrop! Until I met Ciudad. Ciudad is different. Its fruits are larger than other currants. They boast the fruity wildness of the currants bolstered by some solid tomato taste, sweet with acidity, seedy, rich, good. The fruits do not crack *ever*, not on the vine, not after picking, not even after a heavy rain. Long rambling 3-5' vines bear red orange ⅓-½" berrylike fruit in clusters of 9-13. With Ciudad, Fedco is finally "au courant." NEW! A=.2g, 75¢, B=.4g, $1.25, C=1g, $2.25, D=2g, $3.90. *Not available in larger sizes.*

4179 Peacevine Cherry (78 days) Rampant ind. Selected from Sweet 100 Cherry Tomato by Peace Seeds, and almost identical in fruit size and growth habit. Bears gazillions of sweet clusters each with 8 or so 1" fruits. A=.2g, 75¢, B=.4g, $1.25, C=1g, $2.25, D=2g, $3.90, E=10g, $14.00.

4184 Heinz 2653 (68 days) Det. An amazingly early red plum type which often ripens all its 2½-3 oz. fruits before frost. Firm fruits for cooking, on compact plants. Heavy yields early. A=.2g, 75¢, B=.4g, $1.25, C=1g, $2.25, D=2g, $3.90, E=10g, $14.00.

4190 Grandma Mary's (68 days) Ind. Introduced by us in 1992, Grandma quickly zoomed to the top of our sales charts. And no wonder–its meaty 6-10 oz. fruits are unsurpassed for sauce making and very early for their size. It produced ripe fruit even in the cold summers of 1992 and 1996. Seed from this heirloom was selected for 6 years for earliness and fruit size by Jeanne Griffin. *Seed in very short supply, order early.* A=.2g, 75¢, ~100 seeds, *not available in larger sizes.*

4196 Bellstar (74 days) Det. We had so many requests for its return that we have raised our own seed crops the past six years. Bred at Smithfield Experiment Farm in Ontario and introduced in 1981. Red 4 oz. round paste tomatoes are much larger than most others of this type. Delicious flavor is also good in salads. Ripening is spread over a long season. A=.2g, 75¢, B=.4g, $1.25, C=1g, $2.25. *Not available in larger sizes.*

4199 Heirloom Tomato Mix You'd love to be adventurous and try them all but you haven't space for that many tomato plants? Or can't make up your mind which ones to select? Here's the solution: Skip the fuss and leave the choosing to us! We'll mix together a bunch of varieties in one packet. You'll get different colors, sizes, shapes and flavors. All you'll need is an open mind, a good sense of observation, unjaded taste buds and acute deductive faculties. Then you can figure out which ones you like and order them by name next year. A=.2g, 75¢, B=.4g, $1.25, C=1g, $2.25, D=2g, $3.90, E=10g, $14.00.

HYBRID TOMATOES

4205 Early Girl (60 days) Ind. Long the standard of comparison for early commercial slicing tomatoes, Early Girl delivers heavy yields of slightly flattened bright crimson globes averaging 4-6 oz. Its firm texture, blemish-resistant skin and long production period make it ideal for market Good flavor for such an early tomato—sweet, meaty with a hint of tartness. NEW! A=.2g, $1.10, B=.4g, $2.00, C=1g, $3.90, D=2g, $7.00, E=4g, $12.00.

4210 Early Cascade (66 days) Ind. Always very impressive. Begins producing 4 oz. fruits very early, and keeps on till frost and beyond. Has delicious taste despite exceedingly firm thick skin. Holds quality on vine a long time. Disease resistance includes V1, ASC and S. Needs staking. A favorite market variety. A=.2g, $1.10, ~100 seeds, B=.4g, $2.00, C=1g, $3.90, D=2g, $7.00, E=4g, $12.00; 14g, $40.00.

4218 Enchantment (68 days) Ind. Egg-shaped pointed fruits, called "saladette" in the supermarket, look like paste tomatoes but more suitable for eating in salads or out of hand than for processing. Multiple disease resistance includes F1, F2, V1, N and BS. Jim Waltrip, our Petoseed sales rep, once rated Enchantment as the best-tasting tomato. While I wouldn't go that far, I believe it is one of the most underrated varieties on our list. And it is very early. A=.2g, $1.10, B=.4g, $2.00, C=1g, $3.90, D=2g, $7.00, E=4g, $12.00.

4228 First Lady II (70 days) Ind. First Lady II boasts good-tasting round 4-5 oz. fruits bred for the home garden. They color early, and keep coming all season because First Lady II has excellent disease resistance to V, F1, ASC, S and N. A=.2g, $1.10, B=.4g, $2.00, C=1g, $3.90, D=2g, $7.00, E=4g, $12.00.

4242 Firebird (71 days) Ind. If you're not familiar with pink tomatoes, Firebird is a great one to try. Its enthusiastic fans, including my neighbor Ellen Paul, think it is the only tomato you need to grow. Jeanne Griffin liked it better than Brandywine. Skin is sweet. Always among the best early pink tomatoes in our trials, Firebird sets 6-8 oz. globe-shaped almost blemish-free fruits with a deep, rich flavor which will send you back for more. Resistant to TMV, F, V, SEPT. A=.2g, $1.10, B=.4g, $2.00, C=1g, $3.90, D=2g, $7.00, E=4g, $12.00.

4250 Jet Star (72 days) We were lucky to find a supplier for this Harris-Moran exclusive for a few years. But now our only source has dried up and we're forced to drop Jet Star. *Unavailable in 1998.*

4260 Big Beef (75 days) Ind. Many beefsteak varieties are ugly, oversized, mealy balls of fluff. But Big Beef takes away my beef about beefsteaks because it looks great and actually tastes like a tomato. Moreover, it is a real workhorse producer of 10 oz. spotless fruits which start ripening early and keep coming till frost. This large vigorous plant should please both market growers and home gardeners and it certainly pleased the judges who made it a 1994 AAS. Big Beef's bred-in resistance to V, F1, F2, ASC, S, N and TMV helps its sustained performance. Big Beef was such a success for its breeders at Petoseed that they grew enough seed to fill almost 3 million packets in 1995! A=.2g, $1.10, B=.4g, $2.00, C=1g, $3.90, D=2g, $7.00, E=4g, $12.00; 14g, $40.00.

4268 Celebrity (78 days) Det. 1983 AAS from Petoseed deserved award for its impressive seedling vigor and its flavorful, firm 7 oz. fruits. Wide disease resistance includes V1, F1 and 2, ASC, N, S, and TMV. Best-looking tomato seedlings I've ever raised. A favorite of both home gardeners and commercial growers. A=.2g, $1.10, ~66 seeds, B=.4g, $2.00, C=1g, $3.90, D=2g, $7.00, E=4g, $12.00; 14g, $40.00.

4275 Golden Boy (88 days) Ind. Golden Boy has convinced more than a few that a tomato doesn't have to be red to be good. Golden Boy is not just good, it has been at or near the top of each of our tomato taste tests. The deep color and rich flavor of its 8-10 oz. golden yellow fruits makes all those lemon-yellow tomatoes bland by comparison. Because GB's fruits usually develop blemishes if allowed to fully vine-ripen, we recommend picking them slightly underripe and allowing them to finish in the kitchen. Why hail a Taxi when you can get so much more mileage out of a Golden Boy? Tolerant to ASC. A=.2g, $1.10, B=.4g, $2.00, C=1g, $3.90, D=2g, $7.00, E=4g, $12.00.

4282 Sun Gold Cherry (57 days) Ind. To quote one of our customers, "Without these little babies, there's no summer." Sun Gold is the best cherry tomato ever developed, a perfect combination of deep sweetness with a hint of acid tartness. Its small fruits, borne in prolific clusters, ripen very early to a rich apricot color. I pop so many in my mouth that I keep up with the prolific production of 6 plants! Moreover, trialer Linda Dewey says they make excellent soup. "The natural pectin in the tomatoes thickened the soup and the flavor was the best ever." Sungold is the only cherry tomato you need to grow. Resists F1, TMV. A=.1g, $1.10, ~65 seeds, B=.4g, $4.00, C=1g, $9.50, D=2g, $18.00, E=4g, $35.00.

4288 Sweet Chelsea Cherry (68 days) Ind. Even sweeter and heavier-yielding than our old favorite Sweet Cherry. Round fruits are larger than most other cherries, yet produce luscious fruit of almost impeccable appearance relatively early and throughout the season. Wide disease resistance, including TMV and F. A=.2g, $1.10, B=.4g, $2.00, C=1g, $3.90, D=2g, $7.00, E=4g, $12.00.

4296 Super Sweet 100 Cherry (78 days) Ind. Like Sweet 100, only with more disease resistance. Very popular hybrid cherry tomato ripens clusters of 1" round sweet fruits. Should be staked. I like it the best of all the red cherries. Will split in rainy conditions. Resistant to V and F1. A=.2g, $1.10, ~130 seeds, B=.4g, $2.00, C=1g, $3.90, D=2g, $9.00, E=4g, $18.00.

Prices for all culinary and medicinal herbs:
A=65¢, B=$1.80, C=$5.00.

Seeds per packet for herbs are approximate. They are intended as guides, not guarantees, because we pack by weight, not by count. **Available in three sizes except where noted. Weights for each size are listed after each item; prices are in a box at the top of each page.**

Some herbs are customarily grown from divisions or cuttings because they cannot come true from seed, such as French tarragon (available from our Trees & Plants catalog), scented thymes and flavored mints; or require fall sowing of fresh seed, such as sweet cicely and angelica.

A botanical index appears on p. 56.

CULINARY HERBS

We have divided our herbs into two sections: culinary and medicinal. Several listed in the culinary section also have healing uses (Mint, Rosemary, Sage) and many others owe their traditional culinary use to digestive or preservative properties.

4406 Anise *Pimpinella anisum* Annual bears seeds with subtle licorice overtones and a spicy warming flavor. Drunk as a tea in the Middle East. Crush seeds to release full flavor. Used in baking and an essential ingredient in our Springerle. Like many other culinary seeds, Anise helps ease indigestion, gas and colic, and is also a relaxing expectorant good for dry tight coughs. Culture like dill, direct sowing in spring. Sets small white umbel flowers in July which ripen their seed in August and September. 1-3' tall. Germinates in 20-28 days. A=.5 gram, ~100 seeds, B=2g, C=8g. 5,600 seeds/oz.

BASIL *Ocimum basilicum*

Indispensable culinary herb has been in cultivation for more than 3,000 years. Direct seed when soil warms in late spring or transplant after danger of frost. Germinates in 6-10 days. Young seedlings heavily watered in cool cloudy conditions are vulnerable to damping off. Water sparingly at first. Use Reemay to enhance early season vigor and speed maturity. Requires full sun, gets spindly in shade. Harvest before plants blossom. Except where otherwise indicated, all of our basil seed has been tested for fusarium and the sample tested found to be fusarium-free. Such a result, while not guaranteeing the entire lot is fusarium-free, improves your odds. See also **#4728.**

4414 Sweet The heaviest-yielding variety, recommended for drying, all-around great eating, and large-scale pesto production. Our best-selling herb, over 2,700 packets last season. A=4g, ~2,400 seeds, B=28g, C=112g; 1lb @$14.00. 17,750 seeds/oz.

4418 Genovese The choice of many connoisseurs for making pesto. Also called Perfumed Basil. Leaves are slightly smaller and finer than Sweet Basil with more aroma and potency. "Talk about prolific and tasty, and it took transplanting really well," says Susan MacLeod of NOFA-NH. A=2g, ~1,450 seeds, B=10g, C=40g; 1lb @$20.00. 20,500 seeds/oz.

4422 Mammoth This lettuce-leaf type has very large ruffled leaves especially suitable for drying or stuffing. Flavor similar to sweet basil. A=1g, ~600 seeds, B=7g, C=28g. 17,000 seeds/oz.

4430 Spicy Bush *O. b. minimum* This marvelous little basil grows to about 8" and maintains a compact mound of light green leaves and white flowers. Its leaves are small, thin and strong scented. Great as an ornamental border, in a windowbox, or as an indoor potted plant which can be snipped for culinary use. *Not tested for fusarium.* A=.5g, ~420 seeds, B=5g, C=15g. 24,000 seeds/oz.

4436 Anise Originally from Persia. Vigorous mulberry-tinted basil with anise fragrance makes highly decorative, tall, bushy plant. Slow to bolt. Great in Italian tomato sauces. Also used in Thai and various Mediterranean cuisines. A=.5g, ~330 seeds, B=7g, C=28g. 18,800 seeds/oz.

Prices for all culinary and medicinal herbs:
A=65¢, B=$1.80, C=$5.00.

4442 Cinnamon Similar vigorous growth habit to anise basil, but with a purplish veining on its leaves, and a distinctive cinnamon scent. Use in Middle Eastern or Greek cuisine. *Not tested for fusarium.* A=.5g, ~300 seeds, B=7g, C=28g. 17,000 seeds/oz.

4448 Lemon *O.b. citriodorum* Basil often used in bouquets for its intense lemon fragrance. Not a very vigorous grower. Easily succumbs to blight. Great in fish dishes. Native to Thailand and Southeast Asia and featured in their cuisine. *Not tested for fusarium.* A=.5g, ~375 seeds, B=7g, C=28g. 21,000 seeds/oz.

4450 Lime Basil *O. americanum* Stood out in the 1997 basil trial, imparting a robust lime fragrance to the patch. More vigorous than lemon basil, darker green leaves with a stronger, limier flavor. NEW! A=.25g, ~175 seeds, B=1g, C=7g. 20,000 seeds/oz.

4456 Red Rubin Growers have found it to be more vigorous than Purple Ruffles. Highly ornamental dark purplish-bronze foliage. The green leaf throwbacks have been mostly bred out of this improved strain. A salad of red basil leaves and yellow tomatoes is stunning for its color contrast. A=.5g, ~375 seeds, B=2g, C=10g. 21,000 seeds/oz.

4462 Purple Ruffles Deep purple plants with serrated and crinkled leaves for striking visual contrast in the herb garden. Not a vigorous grower in our climate but will reach a height of 18" in the heat of summer. AAS. A=.5g, ~350 seeds, B=1.5g, C=6g. 19,750 seeds/oz.

4506 Chervil *Anthriscus cerefolium* Greek nobles referred to it as *khairephyllon*, or "leaf of joy," and carried sprigs to bless their friends. Superior European strain of this annual grows vigorously and is slow to bolt. Delicate lacy leaves with distinct flavor good in soups, with fish or asparagus. Essential ingredient in mesclun. Direct seed before a rain in early spring or summer. Leaves are ready to harvest 6-8 weeks after sowing. In warmer locations performs best as a fall crop. A=1g, ~440 seeds, B=28g, C=112g. 12,500 seeds/oz.

4512 Chives *Allium schoenoprasum* Hardy perennial. 1-3' hollow grasslike leaves enhance any dish with their subtle onion flavor. Lilac-colored flowers bloom in June and July, lovely in arrangements fresh or dried, also can be eaten. Needs sun and well-drained soil. Seeds may be sown in fall or spring, clumps can be divided every other year for best production. Can be brought inside for the winter. Zones 3-9. A=.5g, ~450 seeds, B=7g, C=28g; 1lb @$12.00. 26,000 seeds/oz.

4518 Cilantro *Coriandrum sativum* Seeds were found in King Tut's tomb and discussed in ancient Sanskrit texts. Useful for its fresh green foliage and for its dried seeds (coriander). Its flowers can also be eaten. This strain does not bolt as readily as those intended for seed production. Produces leaves in generous quantity which are an essential flavoring in Indian, Chinese, Southeast Asian, North African and Latin American cooking. Although some people do not care for its odor, in the right settings it imparts a wonderful flavor. Annual grows to 2' with rosy lavender blooms. Sow in spring; will not stand transplanting. Make succession plantings and keep watered for lustiest leaf production. In warm locations will stand longest as a fall crop. Thin early. Will self sow. Our second most popular herb, we sold more than 2,000 packets in each of the last two seasons. A=2g, ~120 seeds, B=28g, C=112g; 1lb @$8.00. 1,700 seeds/oz.

DILL *Anethum graveolens*

Name derived from the Norse dilla, meaning to lull, as the plant is said to have soothing properties. Charlemagne used dill oil at banquets to stop hiccups and belching among his guests. The Puritans used dill seed to keep their stomachs from grumbling during long church services. Best known in this country for pickling, but essential for great Russian, Polish and Hungarian cuisine. Annual, sometimes classed as biennial, grows to 4'. Upright plant branches out from single stalk; the feathery leaves known as dill weed. Likes full sun, well-drained soil. Direct seed in spring. Will self sow.

4530 Bouquet Bouquet is usually grown for dill weed production because its leaves are sweeter and more refined than those of Mammoth. Foliage should be harvested early, before seed stalks mature. Growers will like its performance in packs. A=4g, ~2,800 seeds, B=28g, C=224g; 1lb @$5.50. 20,000 seeds/oz.

4536 Fernleaf 1992 AAS. A dwarf variety suitable for small gardens or patio containers, Fernleaf grows only half as tall as other varieties and is very slow to go to seed. As of September, most of our May planting had not yet bolted, and its abundant, piquant foliage was still suitable for harvesting. Multibranching plants spread 18" to 2'. A=.5 gram, ~470 seeds, B=2g, C=10g; 1oz @$15.00. 26,500 seeds/oz.

4542 Mammoth Variety generally grown for its seeds. Can also be used as dill weed, but the foliage is slightly darker, coarser and stronger-tasting than that of Bouquet. Otherwise, differences between the two in plant height and habit are very subtle. A=4g, ~2,800 seed, B=28g, C=224g; 1lb @$5.50. 20,000 seeds/oz.

FENNEL *Fœniculum vulgare*

Genus gets its name from the Latin for hay, referring to the smell of the foliage. Perennial grown as an annual with a rich licoricey taste. Tender stalks and leaves are good for relishes, salads, and munching in the garden; leaves & seeds popular in France for fish. Seeds used in sweets, baked goods & beverages. Direct sow in spring when soil warms, in full sun. Keep row moist for good germination.

4556 Zefa Fino Bulbing type. 3' with edible blue-green stems and feathery green leaves. This strain, bred at the Swiss Federal Research Station, is very slow bolting. A spring planting will stand almost all summer. A=.5g, ~125 seeds, B=4g, C=16g; 1oz @$10.00. 7,000 seeds/oz.

4566 Bronze Slow grower with very thin stems is appreciated for its striking feathery bronze foliage. Decorative and delicious. An intriguing addition to mesclun. Sow in spring; likes moisture. Seed grown without chemical fertilizers or pesticides. A=.2g, ~60 seeds, B=.6g, C=3g; 1oz @$6.00. 8,000 seeds/oz.

4576 Garlic Chives *Allium tuberosum* Also known as Chinese chives or Chinese leeks. 1' chive-like herb has strong garlic taste. Can be used as garlic substitute in salads and sautéed vegetables. White flowers may be eaten or used in dried arrangements. Sow thinly in spring, harvest sparingly till plants are vigorous. Perennial, but protect in cold areas. Easier to bring indoors for winter than chives. A=.5g, ~105 seeds, B=14g, C=56g. 6,000 seeds/oz.

4592 Lovage *Levisticum officinale* Leaves have a taste reminiscent of celery, and are used to flavor soups, stews and casseroles. Second-year plants are best for drying. Formerly used to mask the bitter herbs in medicinal concoctions. Has been used as a love charm. Umbelliferous perennial grows 3-6'. Likes good soil and shady, moist areas. Can be direct seeded in late summer or early fall. A=.5g, ~145 seed, B=4g, C=28g. 7,800 seeds/oz.

4616 Sweet Marjoram *Origanum majorana* Grown as an annual in the North. 1' plant with grey-green rounded leaves of enchanting sweet fragrance. Cut often to prevent flowering. Use fresh or dried. Seeds are slow to germinate, take 1-2 weeks. Sow indoors in the spring and transplant 8" apart in well-drained soil. Subject to damping off; do not overwater. Likes full sun. A=1g, ~6,000 seeds, B=7g, C=28g. 169,600 seeds/oz.

4624 Green Magic Mexican Tea *Chenopodium botrys* In our search for the best epazote we found this close relative which we prefer to the better-known herb because it is milder in flavor and more ornamental, yet has much the same uses in Mexican bean dishes and sauces. Its foliage, though oakleaf-shaped rather than serrated, still emits the pleasing pungent aroma characteristic of epazote. Thrives in rich soil and full sun, growing up to waist high. Same genus as lamb's quarters. Annual, will self sow. A=.1 g, ~500 seed, B=.3g, C=1.2g. 140,000 seeds/oz.

4632 Common Mint *Mentha spicata* Don't count on specific types of mint to come true from seed. This is the common tea mint. Start indoors and transplant after danger of frost or direct seed in early fall. Needs light to germinate. Can be grown directly in pots indoors in winter. Keeping it in containers is one way to prevent it from spreading out of hand. Likes moist soil, full sun or partial shade. Perennial to zone 4. A=.1g, ~1,200 seeds, B=1g, C=4g. 341,000 seeds/oz.

4646 Greek Oregano *Origanum heracleoticum* This is the oregano to use in pizzas and other Mediterranean dishes. Low-growing plant with fragrant dull green and purple leaves and white flowers. Start indoors in spring for best results. Likes full sun and light well-drained not very rich soils. Will lose potency if soil is overfed. Hardy to Zone 4 with winter protection. Sometimes survives a few years in Zone 3, but the open winter of 1996-7 was a killer. A=.05g, ~500 seeds, B=.15g, C=.6g. 301,000 seeds per oz.

4656 Rosemary *Rosmarinus officinalis* A tender perennial growing to 3-4'. Cannot withstand temperatures below 17°, may be wintered over indoors if you keep it cool and moist. Try near a cool basement window and keep misted. Dark grey-green needle-like leaves conserve water, can be grown on dry soil. Blossoms range from deep blue to pale pink or white. Likes alkaline soil; peat pots are too acidic to be a good starting medium. Seeds slow to germinate, take 2-3 weeks, start indoors. Zones 8-10. A=.1g, ~85 seeds, B=.6g. *Not available in larger sizes.* 24,450 seeds/oz.

4664 Broadleaf Sage *Salvia officinalis* Hardy perennial to Zone 4; will grow in Zone 3 but winterkill every few years. Grows up to 3', with blue flowers. Used fresh or dried. Tasty in stuffing blends, with eggs, cheese, poultry, pork. Grey oblong leaves on stems which grow woody with age; plants should be replaced every 3 years. Likes sunny spot, well-drained soil. May be sown in early spring for a good fall crop. Takes 2-3 weeks to germinate. A=1g, ~125 seeds, B=7g, C=28g; 1lb @$30.00. 3,450 seeds/oz.

4672 Summer Savory *Satureja hortensis* Annual grows to 1½' with narrow dark-green leaves and lavender flowers. Cut often during growing season, before blossoms appear. Sow in spring next to beans, their complement in the kitchen as well. Use with dry or green beans, rice, stuffings, or in onion soup. Takes 2-3 weeks to germinate. A=1g, ~1,800 seeds, B=14g, C=56g; 1lb @$20.00. 51,500 seeds/oz.

4680 Red Shiso *Perilla frutescens* Annual also known as perilla. Its extremely ornamental purplish-red cinnamon-scented leaves are used in Japanese cuisine in sushi, sweet and sour sauces, and stir-fry. Grows up to 4'. To break dormancy, freeze and thaw the seed several times over a 21-45 day period. Soak seed several days or until they sprout. Move to indoor flats, and transplant into warm soil. Absolutely intolerant of frost. A=.5g, ~600 seeds, B=7g, C=28g; 1oz @$5.00. 33,900 seeds/oz.

4686 German Thyme *Thymus vulgaris* Creeping low-matted perennial to 12" requiring good drainage and at least half day of sun. Brings depth of flavor to soups, gravies, casseroles. Likes alkaline soil. Seeds take 3-4 weeks to germinate; broadcast thickly. Its fine root system makes thyme difficult to move around the garden. Said to calm the nerves, soothe headaches. A=.2g, ~700 seeds, B=7g, C=28g. 98,200 seeds/oz.

4694 Watercress *Nasturtium officinale* Hardy perennial native to Europe. Seeds may be started indoors and transplanted to cold frame; keep watered. Seeds may also be direct sown in soggy stream bank. Likes sunshine. Keep picked; it gets bitter if flowers are allowed to form. Use in salads and soups; rich in vitamins and minerals. A=.25g, ~1,375 seeds, B=1g, C=7g. 155,400 seeds/oz.

Prices for all culinary and medicinal herbs:
A=65¢, B=$1.80, C=$5.00.

MEDICINAL HERBS

People are rediscovering traditional herbal uses for home remedies. Consult Deb Soule's The Roots of Healing (**#6660** in our book section), Gail Edwards' Opening Our Wild Hearts to the Healing Herbs (**#6637**), Penelope Ody's The Complete Medicinal Herbal (**#6520**), James Green's The Male Herbal (**#6619**) or other herbals for more detailed information. See also: Fennel, Mint, Rosemary, Sage in the culinary section; as well as **#5084** Pacific Beauty Calendula. **A botanical index appears on p. 56.**

At Fedco we're not johnny-come-latelies to medicinal herbs. Over the last six years, under the tutelage of Deb Soule, we've steadily increased our selections and our lore in tandem. We also work with Gail Edwards in our continued commitment to make more healing plants available to you. Other medicinal herbs, including Black Cohosh and Comfrey, are available from our Trees & Plants catalog.

Statements about medicinal use of plants have not been evaluated by the FDA, and should not be used for the diagnosis, treatment, cure or prevention of any ailment. Before using or ingesting any medicinal plant, consult a healthcare practitioner familiar with botanical medicine.

4708 Anise Hyssop *Agastache fœniculum* Bushy perennial hardy to Zone 4 permeates the air with the smell of sweet licorice. Long-blooming nectar-laden purple flowers attract bees and make excellent garnishes. Anise-scented foliage and flowers delightful for tea or culinary seasoning. The tea induces sweating and strengthens the heart, was used also for fevers, colds, and by Native Americans as a cough medicine. Sow in late spring in full sun or transplant 1-1½' apart. Can grow 3' tall, 2' wide. Attracts hummingbirds. Related to neither anise nor hyssop. A=.2g, ~520 seeds, B=1g, C=5g. 74,000 seeds/oz.

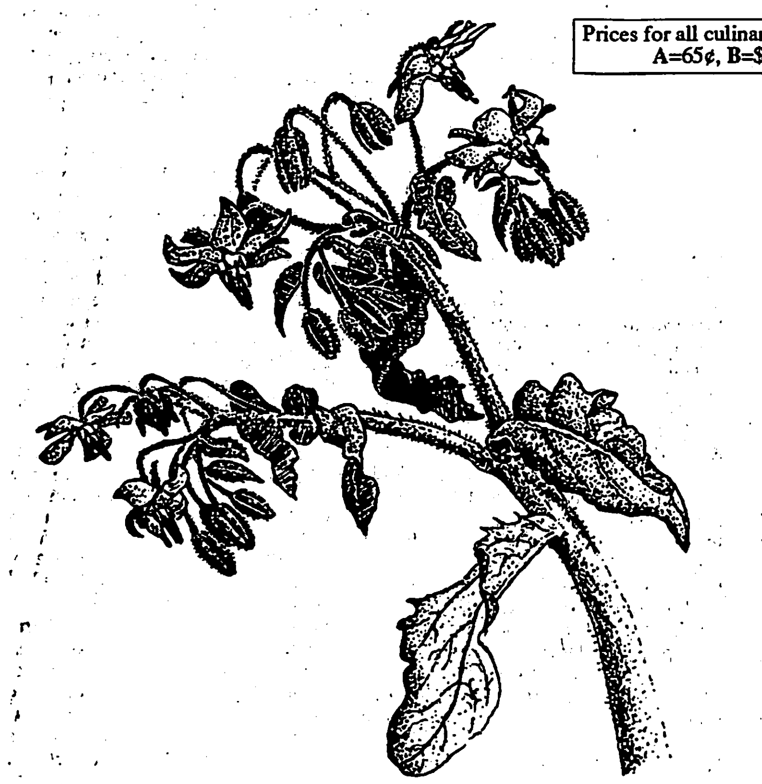
4714 Astragalus *A. membranaceus* Safe, effective adaptogenic tonic to use daily throughout the year, aiding digestion and promoting immune system health (*wei qi*). Called *huang qi* in Chinese and, awkwardly, Chinese Milk Vetch Root in English. Especially good for vegetarians. Also used in cases of exhaustion, food allergy, or depression. Used in China to increase assimilation, improve digestion, and eliminate excess fluid. The American Cancer Society published research showing immune strengthening among patients taking astragalus; other clinical research shows anti-bacterial effects, increased white blood cell production and decreased negative side effects for patients undergoing chemo and radiation therapies. Small pea-like flowers on vaguely familiar vetch plants. 1½-2½' perennial. Harvest 4-6 year-old roots in the fall. Zone 4. A=.2g, ~10 seeds, B=.6g, C=2.4g. 1,400 seeds/oz.

4728 Sacred Basil *O. sanctum* Native to India and used in its cuisine as well as in Thai cooking. Spicier than other basils and quicker to go to seed, but still usable when covered with purple flowers. Said to be an immune system strengthener and to increase oxygen intake to the brain. Used in Ayurvedic medicine as a poultice on acne, ringworm, eczema and insect bites. A=.1g, ~180 seeds, B=.3g, C=1.2g. 50,000 seeds/oz.

4738 Blessed Thistle *Cnicus benedictus* Also known as St. Benedict Thistle, holy thistle and sacred thistle. A hairy annual featuring branched bristly red stems, long spiny leaves with sinuate margins, and yellow flowers, blooming from July through September, surrounded by spines. Its leaves, flowers and roots are edible, the latter boiled as a vegetable. More than one herbalist we know uses it as a liver tonic or digestive bitter. It is said to stimulate gastric and bile secretions, to improve mother's milk, and to be good for hormonal imbalances. Originally from the Mediterranean, it likes dry, sunny locales. *May be emetic in large doses.* Grows 2' tall and 1-1½' wide. A=.1g, B=.3g, C=1.2g.

> Here's flowers for you; hot lavender, mints, savory,
> marjoram; the marigold, that goes to bed wi' the sun.
> *The Winter's Tale* IV, iii, 103

Prices for all culinary and medicinal herbs:
A=65¢, B=$1.80, C=$5.00.



4746 Borage *Borago officinalis* Bushy 2' plants produce many tiny blue, pink and purple flowers which make a colorful addition to salads and can be used in cough syrups. Blossoms frozen in ice cubes lend cucumber flavor to cold drinks. Leaves make a nourishing tea for nursing mothers, and are also good in salad. Seeds a good source of GLAs. Annual likes sun, prefers poor dry soil, will self sow vigorously. Young plants are easy to move around. Direct seed in spring. Survives light frosts. A=1g, ~50 seeds, B=14g, C=56g; 1lb @ $18.00. 2,000 seeds/oz.

4756 Catnip *Nepeta cataria* "If you set it, the cats will get it; if you sow it, they won't know it." Hardy perennial, will self sow once established. Likes sun or partial shade, rich or sandy soils. Direct seed early spring. Said to calm mild stomach disorders, produce restful sleep and relieve fever when added to teas. Decorative when flowering, from July to September. Zones 3-8. A=1g, ~1,400 seeds, B=7g, C=28g. 41,000 seeds/oz.

4766 German Chamomile *Matricaria recutita* Annual easily raised from seed in moist well-drained soil. Sow seeds in spring; after established will self sow. Plant densely so spindly plants support each other. If you want flowers, do not cut the foliage. More floriferous than perennial (Roman) chamomile. Flower heads ready to gather when petals fall back from center. Try using a blueberry rake to harvest them. Herbals claim chamomile tea calms nerves and soothes the stomach. Needs light to germinate. Takes 10-12 days. A=1g, ~9,500 seeds, B=3g, C=15g. 272,000 seeds/oz.

CONEFLOWER *Echinacea spp.*

Possibly the best-known of the medicinal herbs, widely used as an immune system stimulant and tonic. Species contain slightly differing constituents, but all are antibiotic and antiviral, and a useful tonic for allergies. Ethnobotanists have identified at least 14 native North American nations which used Echinacea for similar purposes: sore throat, toothache, infection, wounds, snake bite and skin disorders, as well as hair combs and children's toys. Joanna likes to tincture flowers and leaves in August, and use the same alcohol to tincture seeds and third-year roots in October. A wonderful garden plant: late summer blooms attract butterflies and make good cutflowers; dew collects in the spiral mandala coneheads. Stratify seed 1-4 weeks, then tamp lightly into potting mix; do not cover seed. Start indoors 8 weeks before setting out, can take 20 days to germinate. Zones 3-10.

4774 Narrow-Leaved Coneflower *E. angustifolia* Smallest and least vigorous of all the species, but has more tongue-tingling properties than others. Small taproots can be difficult to harvest. In danger in the wild due to overharvesting by zealous collectors, so cultivate some if you use this species. Short rose-pink petals, spreading and toothy. Tapered hairy leaf. 6-20" tall. Native to dry prairies west of the Mississippi, Saskatchewan to Texas. NEW! A=.2g, B=.6g, C=1.8g. 9,000 seeds/oz.

4776 Purple Coneflower *E. purpurea* Large, showy, vigorous and hardy, a popular garden perennial since the early 1700s. Large fibrous roots are easy to harvest. Colorful flowers range from rose to lavender to purple. Long droopy petals around large spiny centers. Broad toothed leaf. Easy-to-grow, 2-4' tall, native to a wide range of habitats, from Appalachian woods to midwest prairies. Growing in popularity each year and one of the hardest to keep in stock for late orders. Seed grown in Maine without pesticides, herbicides or chemical fertilizers. A=1g, ~260 seeds, B=4g, C=16g. 7,500 seeds/oz.

4782 Elecampane *Inula helenium* Large dramatic plant is an excellent lung tonic. Important to the ancient Greeks, said to have sprung from the tears of Helen of Troy. Mucilaginous root relaxes lungs, calms cough, while it helps clear mucous from lungs. Anti-bacterial and anti-fungal, also used for asthma, bronchitis, cough and flu, especially in children. Helpful for scabies, herpes and other skin disorders (an old name is Scabwort). Needs light and 6-8 weeks to germinate, do not cover the seed. Start indoors, transplant into moist loam; can self-sow. Dig root in mid fall. 5-8' perennial likes full sun or semi-shade. Large bright yellow flowers, blooming May to August, attracted my attention for several years before I learned the plant. Hardy to Zone 3. A=.1g, ~160 seeds, B=.3g, C=1.2g. 45,000 seeds/oz.

4786 Feverfew *Tanacetum parthenium* Strongly scented bushy plant could also be listed with the flowers for its daisy-like white blooms good in bouquets. A tea from the leaves was traditionally used as a relaxant. Chewing on the bitter leaves is said to relieve migraine headaches. Light aids germination which takes 10-14 days. Sow indoors, set out when seedlings have four true leaves. Will self sow. Perennial to Zone 4, maybe 3. A=.1g, ~800 seeds, B=.4g, C=2g. 230,000 seeds per oz.

4796 Horehound *Marrubium vulgare* Perennial forms a 2' bushy stand of grey-green wooly leaves, makes a good border plant. Horehound candies were once the common remedy for coughs and the tea makes a strong beverage. One of the bitter herbs of Passover. Start indoors and transplant into light dry sandy soil while seedlings are still small and soil temperature reaches 60°F, or direct seed. Hardy to Zone 3. A=.2g, ~190 seeds, B=1g, C=7g. 27,600 seeds/oz.

4806 Hyssop *Hyssopus officinalis* A beautiful aromatic perennial border plant which produces spikes of indigo flowers, traditionally used in cough syrups. Can be planted with rosemary and lavender for a colorful and fragrant effect. Its fragrance stimulates alertness and mental clarity. Was used as a strewing herb, thrown on floors to mask odors. Slightly bitter leaves can be added to salads, soups and stews, or used as an expectorant tea. *Epileptics and pregnant women avoid use*. Transplant in sunny spot in light, sandy soil when danger of frost is past. Hardy to Zone 3. A=.5g, ~480 seeds, B=4g, C=16g. 27,600 seeds/oz.

4826 Lady's Mantle *Alchemilla mollis* I first saw this attractive plant with large sprays of greenish-yellow flowers in the lovely gardens at Avena Botanicals. Its leaves hold rain and dew, sparkling in the early morning light. Traditional tonic and remedy for women makes a good border and ground cover in shady locations. Likes moist location or mulch. Flowers provide unusual material for arrangers. Softly hairy wavy-edged leaves unfold like fans in early spring. Can be difficult to germinate, stratifying the seed helps. 12-18" hardy perennial. Zones 3-10. A=.05g, ~145 seeds, B=.2g, C=1g. 82,360 seeds/oz.

4836 Lavender *Lavandula vera* Famous for centuries for its sweet soothing lasting scent. Flowers used as an everlasting in wreaths and arrangements, and as a tea for headache and nervous exhaustion. Hardy perennial reaching 3', woody shrublike plant with grey-green foliage and lavender flowers growing on long-stemmed spikes. Seeds are slow to germinate, like coolness. Freeze them before planting for best results. May be sown outdoors in fall or spring, or started indoors midwinter. Likes well-drained, alkaline soil. Texts claim hardy to Zone 5, but our patch in Zone 3 has survived the last six winters, including the one just past which was rough on many other perennials. A=.3g, ~315 seeds, B=3g, C=15g. 29,975 seeds/oz.

4846 Lemon Balm *Melissa officinalis* Melissa is the Greek word for bee; the plant in flower attracts them. Perennial growing to 2', its lemony leaves, yellow-green, heart-shaped and shiny, should be gathered before flowering. Delicious as a tea, with fruit, or dried for sachets. Relaxing, calming, comforting and uplifting to the spirit. Likes very well-drained soil, intolerant of moist ground, needs at least a half day of sun. Slow to germinate, may be started indoors or out in spring. Tender, needs protection. Should be mulched over the winter in cold areas. Some texts say hardy to Zone 4, but it even winterkilled in Zone 5 last winter. A=.3g, ~550 seeds, B=3g, C=15g. 53,250 seeds/oz.

Prices for all culinary and medicinal herbs:
A=65¢, B=$1.80, C=$5.00.

4854 Lemon Mint *Monarda citriodora* A member of the bee balm genus, in the mint family. Related to Oswego Tea. The tiered pinkish-purple flower spikes of this showy 2-3' plant are long-lasting in fresh bouquets and can be dried for everlasting arrangements. Its lemon-scented leaves are delicious and commonly used to impart a coarse mint flavor with a hint of oregano to tea. Inhale the steam to relieve cold symptoms. Lemon mint will often reseed where it is planted. Annual. A=1g, ~1850 seeds, B=7g, C=28g. 52,500 seeds/oz.

4860 Licorice *Glycyrrhiza glabra* Sweet and soothing root contains glycosides similar to the body's own natural steroids. Beneficial for revitalizing adrenal glands after steroid drug therapy, stress, overwork or excess coffee. Good for colds and bronchitis; reduces throat irritation, yet an expectorant and anti-spasmodic. Also helpful for excess stomach acid, stomach ulcers and intestinal spasms. Adds sweetness, harmony and palatability to nearly any herbal combination. Give it lots of room so it can create the roots and runners you want. Weak competitor against weeds. Prefers sandy loam and a mulch to prevent heaving. Harvest 3-4 year-old roots in the fall. Perennial to Zone 4, grows 1½-4', bears white to violet flowers. A=.1g, ~10 seeds, B=.3g, C=.9g. 2,800 seeds/oz.

4866 Marshmallow *Althaea officinalis* Cousin to the hollyhock, Marshmallow is used to soothe and soften irritated skin and membranes; a stuck, hacking cough, or urinary or prostate problems. Marshmallow also mildly stimulates white blood cell production. Harvest the root of this 4-6' tall ornamental plant in the autumn of the third year. Meanwhile, enjoy the showiness of the flowers through the summer or eat the velvety leaves in salad. All mallows contain soothing mucilage in the root, and marshmallow has the most, so it makes a great home-garden substitute for slippery elm. Steep roots in cold water for several hours. Seed can take a month to germinate. Plant in cool moist light soil in full sun. Zone 4. NEW! A=.4g, B=1.2g, C=4.8g.

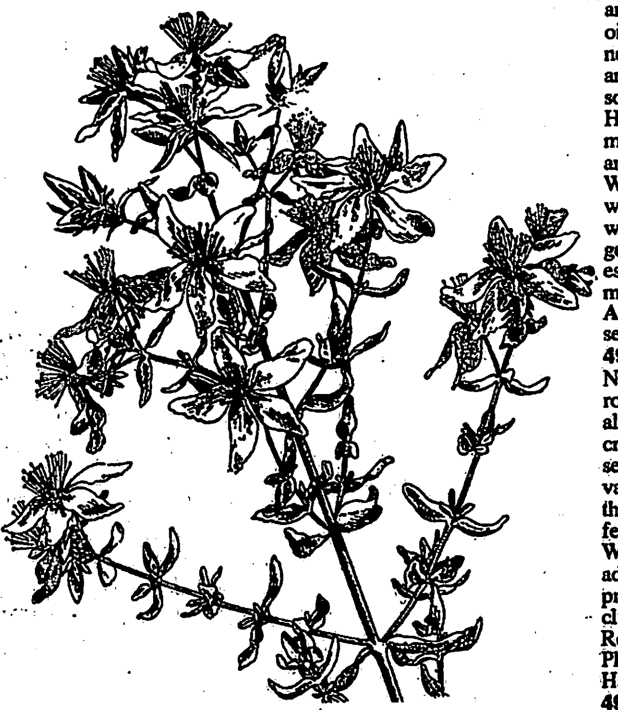
4872 Milk Thistle *Silybum marianum* Named for the bold white splashes on its glossy leaves, said to be from Mary's milk. Fast-growing 3-5' annual with fiercely beautiful leaves, up to 8x24". Young leaves are edible—remove spines first! Flower stalk puts out large purple thistle flowers; said to be eaten like artichokes. Silymarin, a compound found in the flowers and seeds, has been used to strengthen and regenerate liver tissue. Will self-sow; keep a pair of gloves handy to pull unwanted volunteers before they get big and prickly. Likes dry, sunny spot, very tolerant of drought. A=1g, ~40 seeds, B=3g, C=15g. 1140 seeds/oz.

4884 Motherwort *Leonurus cardiaca* The genus Leonurus in Greek signifies lion's tail, to which the plant has a fanciful resemblance. Hardy perennial of the mint family grows 2-3' with dull green leaves having a pungent odor and rather bitter taste. Good bee plant. Pick when flowering for tea or herbal tincture. Believed to strengthen the heart muscle, relieve nervous tension, and used by women during transitional times in their lives. Readily self-sows; pull up first-year basal rosettes before they put out their spiky flower stalk the second year; Motherwort can be invasive, even in relatively poor soil. Hardy to Zone 3. A=.2g, ~240 seeds, B=1g, C=4g. 34,000 seeds/oz.

4896 Mugwort *Artemisia vulgaris* Deeply cut dark green leaves are light silvery-green underneath. Aromatic 2-6' perennial associated with the goddess Artemis and used by women since ancient times. Said useful for menstrual irregularities, and for stimulating liver and digestion. *Pregnant women avoid internal use*. Has been used for dream pillows, as a moth repellent, in beermaking, and for moxabustion. Makes a good homemade incense or smudge. Start indoors, transplant out after last frost. Can be very invasive, small plants are easy to pull, but it also spreads by runners in moist soil, so keep it harvested. A=.2g, ~1300 seeds, B=1g, C=5g. 185,000 seeds/oz.

4908 Stinging Nettle *Urtica dioica* Used by biodynamic gardeners to increase the potency of neighboring herbs, and to stimulate humus formation. Young shoots and leaves are delicious steamed as spring greens, very high in minerals. Also makes a great hair rinse or dry chicken feed. Barbara Sempf, who gardens in St Albans, VT, reports, "The stinging nettle makes a wonderfully stinky nettle tea. Great stuff and not at all appreciated by the ladies who judge at our local field days. Alas." Perennial may spread if not harvested. Choose your spot carefully; the roots as well as the leaves can sting. Cooking or drying removes the sting. Germinates 10-14 days, grows 3-6'. Likes rich composted soil in moist areas, hardy to Zone 2. Seed collected from wild Maine compost piles. A=.2g, ~1,240 seeds, B=.6g, C=2.4g. 175,000 seeds/oz.

4924 Pennyroyal *Mentha pulegium* Hardy groundcover plant is notorious for its insect-repellent properties and can be used to ward off mosquitoes and to repel fleas from pets. Strongly aromatic member of the mint family makes a potent tea. *Caution: Should not be used by pregnant women.* Start indoors at cool temperatures and keep moist. Taking two weeks to germinate, the seedlings are small and grow slowly. Plant 6" apart to make a dense mat. The plants creep with only the lavender flower stalks rising above the ground. Perennial likes rich soil with good moisture; can tolerate shade. A=.1 gram, ~1400 seed, B=.3g, C=1.5g. 400,000 seeds/oz.



4936 Rue *Ruta graveolens* Graveolens means "strong smell." Also known as Herb-of-Grace. Its leaf shape was the inspiration for the suit of clubs! Perennial used as an insect and deer repellent. Very attractive blue-green foliage with delicate yellow flowers. Its leaves, aromatic and bitter, contain iron and rutin for strengthening blood and vessels. Calms heart palpitations, nervous indigestion and colic. European painters used to consume a great deal of it because they believed it was good for their vision! Indeed, it is used in eyewash to soothe tired eyes and relieve headaches from eyestrain. *Rue should never be ingested by pregnant women*. Several herbalists warn that large doses can cause pain and vomiting; also contact dermatitis in sensitive individuals. Ancients rubbed their arms in olive oil before harvesting to prevent dermatitis. Likes a sunny location with poor soil. Needs good drainage. Germinates 10-14 days. 2'. Zones 3-9. A=.5g, ~300 seeds, B=3g, C=15g. 16,300 seeds per oz.

4964 Skullcap *Scuttelaria lateriflora* Native spreading perennial needs moist rich soil and likes partial shade. Herbalists claim it is an effective headache remedy and great for insomnia. Both calms and strengthens the nervous system. Skullcap finds its way into daily teas as well as formulas for chronic conditions. Enjoy it for its numerous small blue flowers from July through September or put it in a pillow to induce restful sleep. Germination slow, takes 3-4 weeks. 1-2' plant is hardy to Zone 4. **BACK!** A=.05g ~29 seeds, B=.2g. *Not available in larger sizes*. 16,800 seeds/oz.

4972 Spilanthes *S. oleracea* I love to give visitors at Shooting Star Farm a couple of spilanthes leaves to chew. Their reaction—either a blissed out smile of contentment or a horrified expression of concern—is generally not long in coming. Spilanthes' remarkable tingling and mouth-numbing properties manifest themselves rapidly and last a while. Its common names—Salad Cress and Toothache Plant—tell us to use its bronzy-purple leaves in salad, or to chew the leaves and flowers for temporary pain relief. But its surface-immune stimulating properties, similar to echinacea's, are beginning to give this little-known and seldom-listed herb a wider audience. We owe our awareness of it to Deb Soule. Native to Central America, Spilanthes is highly frost-sensitive and must be started indoors in warmth and transplanted after all danger of frost. It adds unusual beauty with its low growth habit and comical rayless red flowers surrounded by yellow rings. A real conversation piece and a valuable herb. Seed grown in Maine without pesticides, herbicides or chemical fertilizers. A=.01 gram, about 30 seeds, B=.04g, C=.16g. 275,000 seeds/oz.

4980 St Johnswort *Hypericum perforatum* Pretty yellow flower of fields and meadows turns a deep red in tinctures and oils. Used as tea, tincture or infused oil for many nerve disorders, from neuralgia and sciatica to anxiety, insomnia, stress, mild depression, seasonal affective disorder and chronic exhaustion. Helpful during menstruation, postpartum and menopause. The oil is also cooling to sunburn and cuts, soothing to strained joints and muscles. Was even used in the Middle Ages for sword wounds! Likes full sun, nearly any soil. Prechill 4 weeks, do not cover the seed, needs light to germinate, takes 20-30 days. Drought-tolerant but essential oil content increases with some moisture. 1-2' perennial hardy Zones 3-10. A=.1g, ~1,200 seeds, B=.4g, C=1.6g. 350,000 seeds/oz.

4984 Valerian *Valeriana officinalis* Known as Nature's Tranquilizer or Herbal Valium, valerian root is used to reduce tension and anxiety, alleviate insomnia, and relieve uterine or bowel cramping. Harvest the roots in the fall of the second or later year. Early Greeks referred to valerian as "phu" (like our "phew"), because of the distinctive smell of the roots, described as fetid, musky, or the aroma of old sneakers. Widely used in Europe as a tranquilizer, both for adults and hyperactive kids. Avoid high doses for prolonged periods. Tall leafy 3-5' plant with clusters of honey-scented pale pink flowers. Remove flowers to hasten root development. Plant in full sun or partial shade, about 1' apart. Hardy to Zone 3. NEW! A=.2g, B=.6g, C=2.4g.

4990 White Yarrow *Achillea millefolium* Flat-topped white flowers bloom June-August with an odd alluring scent that attracts bees and butterflies. One of the most popular herbs for colds and flu. A hot cup of tea induces a sweat to throw off heat and toxins. Also used to lower blood pressure, and to stanch internal and external bleeding. New research indicates yarrow may be helpful for hay fever or other allergenic mucosal reactions. Avoid large doses during pregnancy. Seeds need light to germinate; do not cover. Likes full sun (grows straggly in shade), will grow 1-2'. Perennial spreads slowly, preferring lean soil. Rich garden soil may produce 3' lush plants which need staking. Zones 2-10. A=.1 g, ~700 seeds, B=.3g, C=1.2g. 200,000 seeds/oz.

VEGETABLE PLANTING GUIDE

Vegetable	Catalog #	sds/oz	sds/100'	Pkt plants	distance apart	thin to	row spacing	seed depth	min soil temp °F	ideal soil temp	hardiness	planting date
Amaranth	3000-12	25000	1/16 oz	100'	3"	6"	18"	1/8"	60	70-85	T	June 1
Artichoke	3608	180	T	10 pl	3'	No	2'	1/2"	60	65-85	MH	tp late
Basil	4410-99,4728	18000	5g	10-80'	1/2"	4"	18"	1/4"	65	70-85	VT	June 1
Bean, Bush, Dry	200-499	80	8 oz	25'	2"	3"	2-3'	1"	60	70-85	T	late May
Bean, Fava	298	17	1#	12'	4-6"	No	2-3'	1"	50	60-80	H	April
Bean, Pole	286-92,400-19	65	4 oz	10 pl/oz	6/pole	3/pole	3-4'	1"	60	70-85	T	late May
Bean, Soy	488	110	4 oz	14'	3"	No	3'	1"	60	70-90	T	June 1
Beet	2100-99	2200	1/2 oz	20'	1"	2-4"	12-18"	1/2"	50	65-85	H	Apr-July
Broccoli	3310,3400-75	7000	5g	.5g=10'	1"	24-30"	30"	1/4"	50	65-85	MH	tp May/June
Brussels Sprouts	3480	5000	5g	.5g=10'	1"	24-30"	24-30"	1/4"	50	65-85	H	tp May/June
Cabbage	3320-39,3500-40	7500	5g	.5g=10'	1"	24-30"	24-30"	1/4"	50	65-85	MH	tp May/June
Carrot	2000-99	18000	10g	1/8oz=35'	1/4"-1/2"	1"	16-24"	1/2"	50	65-85	H	Apr-July
Cauliflower	3348,3544-79	8000	4g	.5g=12'	1"	30"	30-36"	1/4"	55	65-85	MH	tp May/June
Celery/Celeriac	3610-49	75000	T	500	8"	No	2-3'	1/8"	50	55-70	T	tp June 1
Chard	3030-49	2000	1/2 oz	12'	1"	3"	18-24"	1/2"	50	65-85	H	ASAP
Chicory	2640-59	1800	T	300 pl	1'	No	2'	1/8"	50	60-85	H	tp late June
Chinese Cabbage	3276	9500	1/4 oz	25'	1/2"	12-18"	24-30"	1/4"	50	70-95	MH	late May
Corn	500-699,5930-49	155	4 oz	50'	2-3"	1'	3'	1"	60	70-95	T	late May
Cucumber	1200-1399	1100	1/2 oz	11'	2"	4"	4'	1/2"	60	75-95	VT	June 1
Eggplant	3650-90	6000	T	40 pl	20-30"	No	30-36"	1/4"	68	75-85	VT	tp early Jun
Endive	3060-99	18000	5 g	40'	1"	8"	18-24"	1/4"	50	60-85	H	Apr-July
Gourds, large	1761-99	175	T	20 pl	6/hill	2-3/hill	6'	1/2"	60	70-90	T	tp early Jun
Gourds, small	1700-60	700	1/6 oz	30 hills	6/hill	3/hill	4-6'	1/2"	60	70-90	T	late May
Kale & Collard	3350-89,3586	7500	5 g	40'	1"	12"	2'	1/4"	50	65-85	VH	ASAP-July
Leek	2400-29	10000	T	600 pl	8"	No	2'	1/2"	50	60-80	MH	tp May 1
Lettuce	2700-2999	25000	4g	1g=25'	1/4"	1'	12-18"	1/8"	40	50-75	H	ASAP-Aug
Mache	3100-19	18000	1/4 oz	30'	1/2"	2"	18"	1/4"	48	50-80	VH	ASAP-Aug
Muskmelon	900-49,1000-99	1200	T	5 hills	3/pot	2/hill	5'	1/2"	68	80-95	VT	tp early Jun
Mustard	3138,3200-59	15600	1/8 oz	45'	1"	4-6"	2'	1/4"	50	65-85	MH	Apr-Aug
Okra	3696	420	T	30 pl	12"	No	2-3'	1/4"	65	70-95	VT	tp early Jun
Onion	2440-99	6500	T	400 pl	4"	No	12-18"	1/2"	50	60-85	MH	tp May 1
Pac Choi	3260-75	12500	1/4 oz	30'	1/2"	6-12"	2'	1/4"	50	70-95	MH	May
Parsley	3150-79	18000	1/4 oz	25'	1/4"	1"	12-18"	1/4"	50	50-85	VH	Apr-Aug
Parsnip	2300-10	5000	1/2 oz	25'	1/2"	2-3"	12-18"	1/2"	52	60-77	VH	Apr-July
Pea/snow, snap	700-899	110	8 oz	30'	1 1/2"	No	3' dwarf 5' tall	3/4"	48	65-85	plants H blossoms,pods T	ASAP
Pea/snow, snap for fall crop												late June
Pepper	3700-3999	4500	T	10-50 pl	12-18"	No	2-3'	1/4"	68	75-85	VT	tp early Jun
Pumpkin	1670-99,1900-99	210	1/2 oz	4-8 hills	6/hill	3/hill	6'	1"	60	70-90	T	late May
Radicchio	2660-99	20000	1/2 oz	30'	1"	8-10"	18"	1/8"	50	60-85	H	late June
Radish	2200-99	2500	1 oz	15'	1/2"	2"	18"	1/2"	50	60-85	H	Apr-Aug
Scorzonera	2322	2000	.6 oz	20'	1"	2"	18"	1/2"	50	65-85	H	Apr-Jun
Spinach	2500-99	2600	1/2 oz	50'	1"	2"	12-18"	1/2"	42	60-80	VH	ASAP
Spinach, fall crop												Aug
Squash, patty pan	1580-99	300	.6 oz	5 hills	6/hill	3/hill	4'	1"	60	70-90	T	late May
Squash, winter	1600-1999	120-480	1/2-1 oz	2-15 hills	6/hill	3/hill	4-6'	1"	60	70-90	T	late May
Squash, summer	1500-99	375	1/2 oz	6 hills	6/hill	3/hill	4'	1"	60	70-90	T	late May
Tomato	4000-4299	9000	T	50-125pl	3'	No	3'	1/4"	60	68-80	T	tp June 1-10
Turnip/Rutabaga	2350-99	9000	1/4 oz	40'	1/2"	3-4"	18"	1/4"	50	60-95	H	Apr-July
Watermelon	950-99,1100-99	700	T	4 hills	3/pot	2/hill	5'	1/2"	68	80-95	VT	tp early Jun
Zucchini	1400-79	180	1 oz	3-4 hills	6/hill	3/hill	4'	1"	60	70-90	T	late May

For information on herbs & flowers please see the variety descriptions.

Abbreviations: Pkt plants=how many row feet our smallest packet will plant T=transplanted only, in our climate.
tp=transplant pl=plants g=grams, 28.4g=1oz. No=not necessary to thin

Hardiness rating
VT=very tender=will not survive frost, can be damaged by temperatures under 40°
T=tender=will not survive frost
MH=moderately hardy=survives light frosts
H=hardy=survives frost generally to the low twenties
VH=very hardy=will winter over if protected

Seed Storage

Keep your seed alive by storing it properly! Moisture, humidity and high temperatures are the worst enemies of seed viability. Find a storage area where the sum of relative humidity and temperature is below 100 or place your packets in a glass jar in your freezer or refrigerator. Never keep seed packets in a sunny location, and do not leave them in your greenhouse even for a few hours!

Most seed stored properly will last for several years. A few seeds, such as onions, parsnips and parsley, are short-lived. If in doubt try germinating a sample of your old seed in moist paper towels.

Approximate planting date: ASAP=as soon as ground can be worked, does not thrive in heat
Approximate planting dates are for *our* Central Maine climate. Please make appropriate adjustments for your climate, using hardiness as a guide.

Notes: Seed counts are provided as a *guide*, not a *guarantee*. They vary from cultivar to cultivar. (For more information see the variety descriptions.) You can stretch your seeds further with careful planting. We get a lot more row feet out of a packet of beets serenely planted on a breezy sunny bug-free afternoon than out of the same packet hastily sown in a humid mosquito-infested twilight! Planting rates will vary if intensive methods such as beds are used. Minimum soil temperatures are the lowest we can recommend if you want a good stand. Planting under slightly colder conditions is possible but germination will be slow and spotty. If you have specific cultural questions, consult more detailed resources or get in touch with us.

For Your Gardening Enjoyment

by CR Lawn

I have found the following to be most important to gardening success:

Make your own compost. You don't have to be an expert to make perfect plant food. Even if you know nothing about carbon-nitrogen ratios, and turn your pile (s) only once a year, you can make great compost by piling varied organic matter in thin layers. It's amazing what compost can do for your plants. In June, 1989, when it was too wet anywhere in my garden to set out my tomato plants, I spread a 6-inch layer of compost over a small area, and set them right in it. Those plants were the healthiest and most prolific I'd ever grown. Carrots and onions also respond spectacularly to the same treatment.

Overcrowding plants is a common cause of failure. Thin, thin, thin! Throw away those books that tell you to plant broccoli 16 inches apart. You will get spindly plants with puny heads if you space them that closely. An apprentice at my farm once planted sweet corn seed too deep. The resulting stand was about one half as dense as I would have liked, but the roomy plants ripened better than three full-sized ears apiece! Joann and Gene have encouraged me to thin everything from sweet basil to bachelor's buttons, bush beans to senposai, with great results. The surviving plants quickly become healthy, robust and productive! To get maximum benefits, start thinning early when your plants are small.

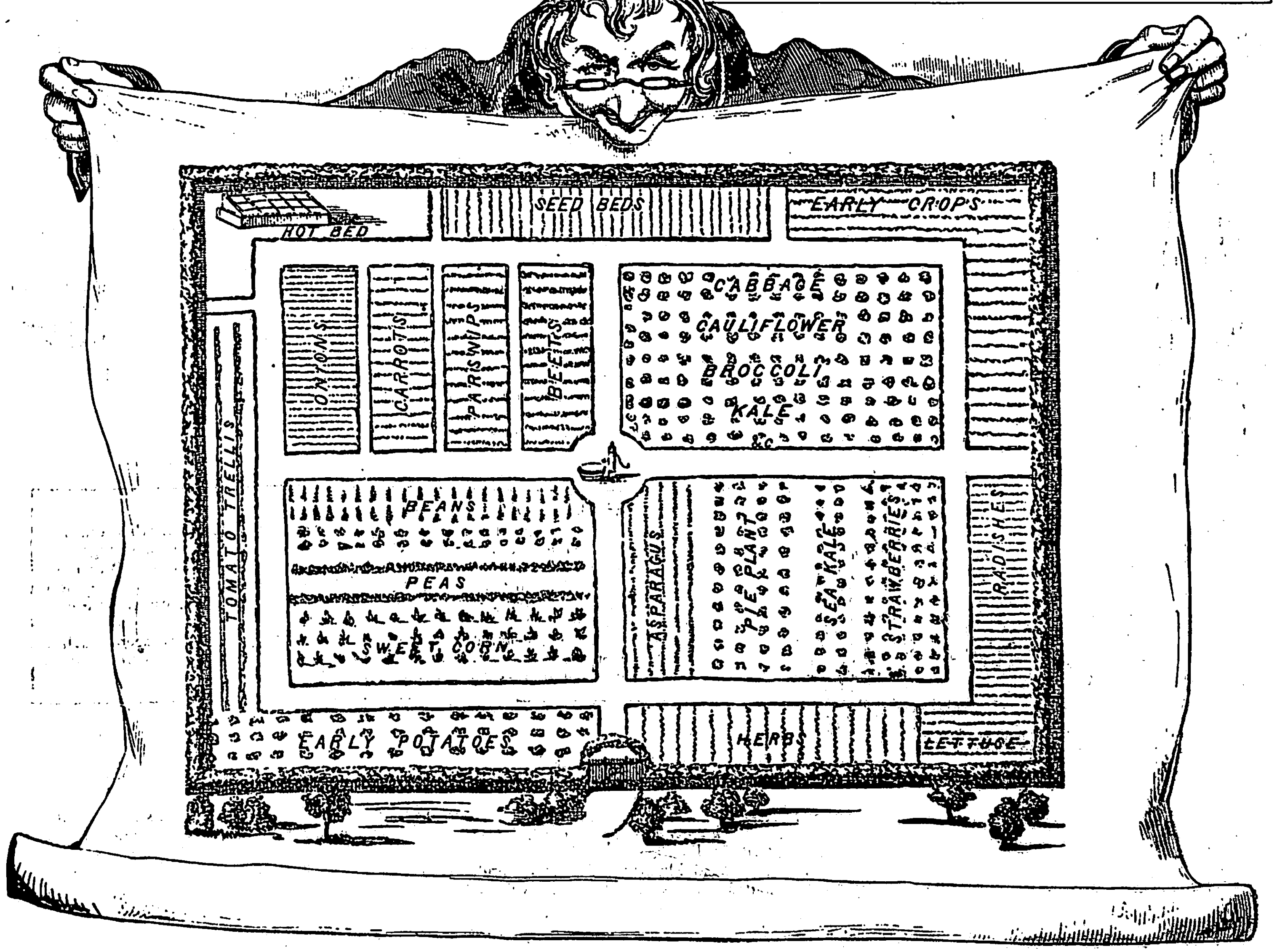
Get the jump on the weeds. That first cultivation when your plants are just emerging is the most important one. Time invested in weed control early in the season pays ninefold dividends in saving backbreaking labor later. Many crops such as onions and carrots have no chance in a weedy patch.

Work with the weather, not against it. Pulling weeds out of soft moist soil when the sun first comes out after a rain is so much more rewarding than trying to tug them out of dry, baked soil. Your soil and plants can teach you the optimal times to sow, cultivate, mulch and harvest. Learn to be an amateur weather prognosticator by studying clouds, wind direction, temperatures, the moon, and your barometer. It will make you a better gardener, and besides, it is fascinating. When you get good at it, you will not only be able to laugh at errant television weather "experts," but you will also be able to get away with a high percentage of what look to outsiders to be garden gambles, but really aren't!

Feed your soil. Heavy cropping takes an enormous toll on soil nutrients, which must be replaced if your plot is to maintain fertility. We apply animal manures, compost, and spoiled hay in liberal quantities to ensure optimal growth. If your squashes, greens, sweet corn and brassicas don't develop deep rich foliage color, they need more nitrogen. If their foliage is streaked with purple, your plants aren't getting enough phosphorus.

Plants need abundant water, particularly early in their growth cycle. Even in my boggy spot, I have had to water in recent years.

> Our bodies are our gardens, to the which our wills are gardeners; so that if we will plant nettles or sow lettuce, set hyssop and weed up thyme, supply it with one gender of herbs or distract it with many, either to have it sterile with idleness or manured with industry, why, the power and corrigible authority of this lies in our wills.
> *Othello* I, iii, 323

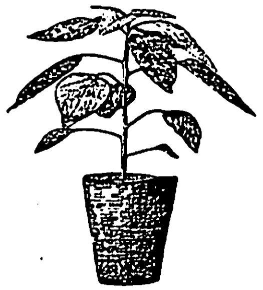


MOFGA-Certified Organic Seedlings

(for pickup at our annual Tree Sale, May 1-3, 1998)

Additional varieties of vegetables & herbs will be available at the Tree Sale, along with a wide selection of annual & perennial flowers.

Final order deadline - Friday, March 13, 1998



From mailing label: CC-

Name:

Mail Address:

Town: Zip

Telephone:

Order the number of 6-paks needed, not the number of plants. Please use a red or other bright pen.

Item #	Variety	Quantity	Our use	Item #	Variety	Quantity	Our use
2414S	Leek, Imperial			4296S	Cherry Tomato, Super Sweet 100		
2438S	Scallion, Evergreen Hardy White			4418S	Basil, Genovese		
2472S	Onion, Copra			4536S	Dill, Fernleaf		
2484S	Onion, Ailsa Craig			4646S	Greek Oregano		
3158S	Parsley, Gigante d'Italia			4664S	Broadleaf Sage		
3166S	Parsley, Forest Green			4686S	German Thyme		
3334S	Cabbage, Laso Red			X508S	Ageratum, Blue Hawaii, light blue		
3422S	Broccoli, Emperor			5084S	Calendula, Pacific Beauty		
3480S	Brussels Sprouts, Prince Marvel			5126S	Cleome, Rose Queen		
3503S	Cabbage, Hermes			5140S	Cosmos, Sensation Mix		
3624S	Celery, Ventura			5234S	Marigold, Sparky		
3764S	Hot Pepper, Jalapeño			5244S	Marigold, Lemon Gem		
3810S	Pepper, New Ace			5248S	Marigold, Tangerine Gem		
4155S	Tomato, Brandywine			5288S	Nasturtium, Jewel Mix		
4196S	Paste Tomato, Bellstar			5306S	Pansy, Swiss Giant Mix		
4205S	Tomato, Early Girl			5368S	Snapdragon, Panorama F2		
4260S	Tomato, Big Beef			5374S	Stock, Dwarf Ten Weeks Mix		
4268S	Tomato, Celebrity			5490S	Zinnia, State Fair Mix		
4275S	Tomato, Golden Boy			5582S	Impatiens, Pink Swirl, 4-pak		
4282S	Cherry Tomato, Sungold			5884S	Sweet Annie		

total number of 6-paks ordered		
multiply by price per 6-pak	$2.50	$2.50
SUBTOTAL		
Add 6% Maine sales tax		
GRAND TOTAL		

VISA or MasterCard #

Expiration date Amount

Name on card

Cardholder signature

You may pay with VISA or MasterCard or send one check or money order payable to Fedco. Please pay by check if the total of your orders is under $25. Sorry, we do not accept food stamps. You may combine your orders to make one payment, but not to figure discounts.

Your card will be charged the total of your enclosed orders when we receive them. We will bill or refund you for any adjustments as each order is completed. We cannot charge the adjustments to your credit card. You may fax credit card orders. We do not take phone orders. Thank you.

Send to: Fedco Seeds, PO Box 520, Waterville, ME 04903

Seeds Short Order Form 1998 (1020-EZ)

Seeds items **1-6899** only.

From mailing label: CC -

Farm or Group Name

Name

Mailing Address

Town Zip

Road Name (required by UPS)

Town Zip

Telephone

Number of households ordering ______

	Yes	No
Will you accept substitutions?	☐	☐
May we give your name to other customers?	☐	☐
May we give your name to organizations & businesses?	☐	☐
Are you a commercial grower?	☐	☐

Would you like (to continue) to receive our other seasonal mailings?

Fruit & Nut Trees, Berries, Ornamentals, Bareroot Perennials	☐	☐
Fall-planted Flower Bulbs & Seed Garlic	☐	☐

Delivery Options: ✓ check one only

UPS: ☐ regular (must order by 3/20)

Pickup: ☐ early (must order by 1/16)

Pickup: ☐ regular (must order by 2/13)

Pickup: ☐ late (must order by 3/20)

Truck: ☐ must contact Michael Gulick

Other: ☐ Please specify

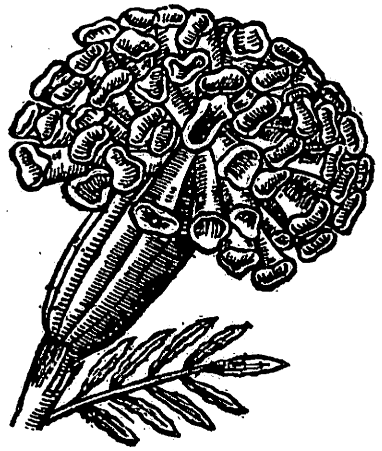
See p.5 in the catalog for more information

Directions for Form 1020-EZ 1998

1. **Order only Fedco Seeds items on this form (#'s 1-6899).**
   Do not order Potatoes (Moose Tubers) or Supplies (Organic Growers Supply) here.
   Potatoes order form begins on page 42E in the center of the catalog. Supplies order form begins on page 42G.
2. Please fill in the information above. We must have a road name for UPS shipments.
3. Please plan your order before filling out the order form. Please keep a copy of your order.
4. Please write your order in catalog number order. Write clearly in pen, not pencil.
5. Make sure you have the correct catalog number. Do not write the name of the item. Write the catalog number only.
6. Make sure you are ordering an available size. Write the code letter for the size. Do not write the weight.
7. If you are ordering more than 49 items, please use our long order sheet. Call us, we'll send you one.
8. Only MAINE residents pay sales tax.
9. Only Fedco Seeds items #5000-6899 are taxable. Other Fedco Seeds items are not taxable.
10. You may combine orders to calculate the small order handling charge. Fill out your separate order forms and send them in one envelope.
    If the combined subtotal is over $50, pay no handling charge. If less than $50, please enclose one $3 handling charge.

If you fill out this form correctly and in numerical order, we'll send you a free seed packet (our choice).

Suggestions:



Seeds Short Order Form 1998 (1020-EZ)

Page 42D Seeds items only **1-6899.** Directions on the other side.

DO NOT ORDER POTATOES OR SUPPLIES ON THIS FORM!

Write clearly and list items in numerical order. Double-check your item numbers. Please use pen.

	Item Number	Size Letter	Quantity		Price per	Total Price		Item Number	Size Letter	Quantity		Price per	Total Price
EX	1234	B	2		0.00	0.00	25						
1							26						
2							27						
3							28						
4							29						
5							30						
6							31						
7							32						
8							33						
9							34						
10							35						
11							36						
12							37						
13							38						
14							39						
15							40						
16							41						
17							42						
18							43						
19							44						
20							45						
21							46						
22							47						
23							48						
24							49						

Column 1 subtotal

Column 1 subtotal

MAINE residents, items 5000-6899 only. 6% ME sales tax

No tax for folks outside Maine. SUBTOTAL

Please use the box below ONLY if you are sending this order directly to Fedco Seeds.

Add $3 to one of the enclosed orders if their combined subtotals do not exceed $50

Volume discounts apply only to orders we receive on or before Feb. 13:
10% over $100; 15% over $200; 20% over $300; 22% over $600; 24% over $1000 Deduct volume discount

Deduct 10% if picked up

Deduct 1% organic grower discount

VISA or MasterCard #

Expiration date Amount

Name on card

Cardholder signature

☐ Donate all my refund to MOFGA ADJUSTED TOTAL

☐ up to $5.00 MOFGA permanent site donation

☐ up to $3.00 MOFGA/NOFA membership(s)

☐ up to $1.00 GRAND TOTAL

You may pay with VISA or MasterCard or send one check or money order payable to Fedco. Please pay by check if the total of your orders is under $25. Sorry, we do not accept food stamps. You may combine your orders to make one payment, but not to figure discounts. Your card will be charged the total of your enclosed orders when we receive them. We will bill or refund you for any adjustments as each order is completed. We cannot charge the adjustments to your credit card. You may fax credit card orders. We do not take phone orders. Thank you.

Send to: Fedco Seeds, PO Box 520, Waterville, ME 04903

Seeds Short Order Form 1998 (1020-EZ)

Seeds items **1-6899** only. Page 42C

From mailing label: CC -

Farm or Group Name

Name

Mailing Address

Town Zip

Road Name (required by UPS)

Town Zip

Telephone

Number of households ordering ____

	Yes	No
Will you accept substitutions?	☐	☐
May we give your name to other customers?	☐	☐
May we give your name to organizations & businesses?	☐	☐
Are you a commercial grower?	☐	☐
Would you like (to continue) to receive our other seasonal mailings?		
Fruit & Nut Trees, Berries, Ornamentals, Bareroot Perennials	☐	☐
Fall-planted Flower Bulbs & Seed Garlic	☐	☐

Delivery Options: ✓ check one only
- **UPS:** ☐ regular (must order by 3/20)
- **Pickup:** ☐ early (must order by 1/16)
- **Pickup:** ☐ regular (must order by 2/13)
- **Pickup:** ☐ late (must order by 3/20)
- **Truck:** ☐ must contact Michael Gulick
- **Other:** ☐ Please specify

See p.5 in the catalog for more information

Directions for Form 1020-EZ 1998

1. **Order only Fedco Seeds items on this form (#'s 1-6899).** Do not order Potatoes (Moose Tubers) or Supplies (Organic Growers Supply) here. Potatoes order form begins on page 42E in the center of the catalog. Supplies order form begins on page 42G.
2. Please fill in the information above. We must have a road name for UPS shipments.
3. Please plan your order before filling out the order form. Please keep a copy of your order.
4. Please write your order in catalog number order. Write clearly in pen, not pencil.
5. Make sure you have the correct catalog number. Do not write the name of the item. Write the catalog number only.
6. Make sure you are ordering an available size. Write the code letter for the size. Do not write the weight.
7. If you are ordering more than 49 items, please use our long order sheet. Call us, we'll send you one.
8. Only MAINE residents pay sales tax.
9. Only Fedco Seeds items #5000-6899 are taxable. Other Fedco Seeds items are not taxable.
10. You may combine orders to calculate the small order handling charge. Fill out your separate order forms and send them in one envelope. If the combined subtotal is over $50, pay no handling charge. If less than $50, please enclose one $3 handling charge.

If you fill out this form correctly and in numerical order, we'll send you a free seed packet (our choice).

Suggestions:

Seeds Short Order Form 1998 (1020-EZ)

Seeds items only **1-6899.** Directions on the other side.

DO NOT ORDER POTATOES OR SUPPLIES ON THIS FORM!

Write clearly and list items in numerical order. Double-check your item numbers. Please use pen.

Column 1 subtotal

	Item Number	Size Letter	Quantity		Price per	Total Price		Item Number	Size Letter	Quantity		Price per	Total Price
EX	1234	B	2		0.00	0.00	25						
1							26						
2							27						
3							28						
4							29						
5							30						
6							31						
7							32						
8							33						
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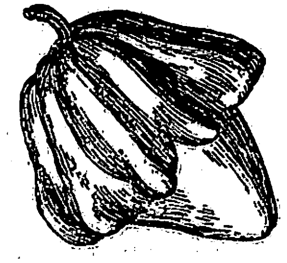
14							39						
15							40						
16							41						
17							42						
18							43						
19							44						
20							45						
21							46						
22							47						
23							48						
24							49						

Column 1 subtotal



MAINE residents, items 5000-6899 only- 6% ME sales tax	
No tax for folks outside Maine. SUBTOTAL	
Please use the box below ONLY if you are sending this order directly to Fedco Seeds.	▨
Add $3 to one of the enclosed orders if their combined subtotals do not exceed $50	
Volume discounts apply only to orders we receive on or before Feb. 13: 10% over $100; 15% over $200; 20% over $300; 22% over $600; 24% over $1000 Deduct volume discount	
Deduct 10% if picked up	
Deduct 1% organic grower discount	

VISA or MasterCard #	☐ Donate all my refund to MOFGA	ADJUSTED TOTAL
Expiration date Amount	☐ up to $5.00	MOFGA permanent site donation
Name on card	☐ up to $3.00	MOFGA/NOFA membership(s)
Cardholder signature	☐ up to $1.00	GRAND TOTAL

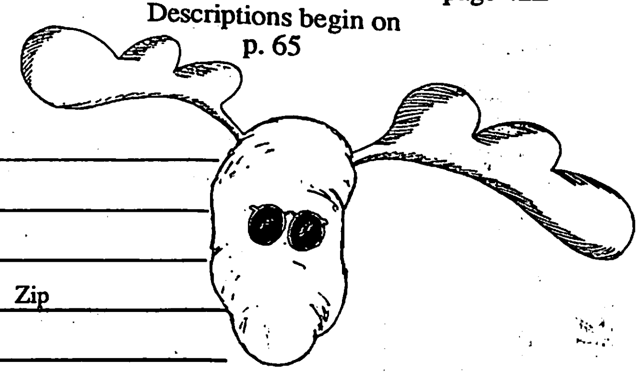
You may pay with VISA or MasterCard or send one check or money order payable to Fedco. Please pay by check if the total of your orders is under $25. Sorry, we do not accept food stamps. You may combine your orders to make one payment, but not to figure discounts.

Your card will be charged the total of your enclosed orders when we receive them. We will bill or refund you for any adjustments as each order is completed. We cannot charge the adjustments to your credit card. You may fax credit card orders. We do not take phone orders. Thank you.

Send to: Fedco Seeds, PO Box 520, Waterville, ME 04903

Moose Tubers 1998

Descriptions begin on p. 65



from mailing label CC-

Farm or Group Name

Name

Mailing Address

Town Zip

Road Name (required by UPS)

Town Zip

Telephone

Delivery Options: ✓ check one only.

UPS: ☐ (must order by 4/24)

Pickup: ☐ Moose Tubers (must order by 3/20)

Pickup: ☐ Fedco Tree Sale (must order by 3/20)

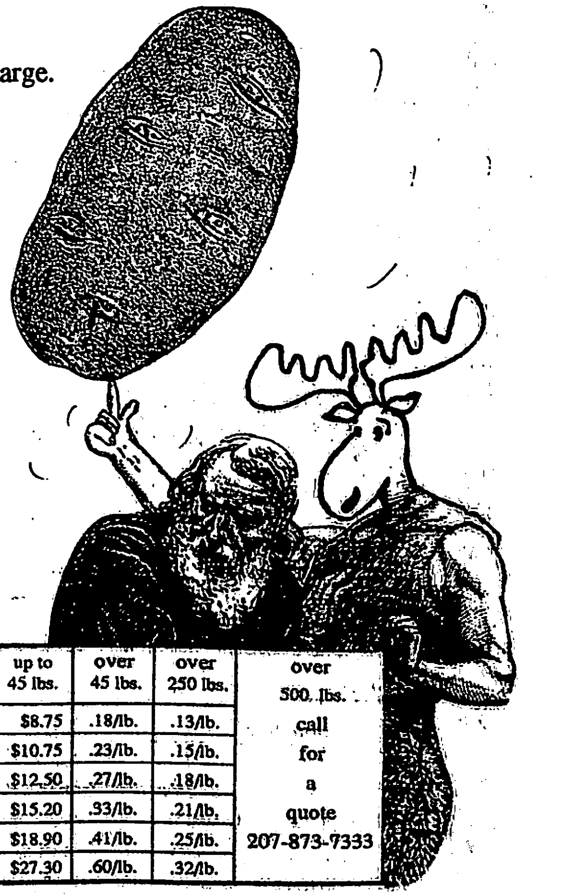
Common Carrier ☐ call for quote

Check here ☐ for **no** substitutions

see Substitutions on p. 63

1. **Order only Moose Tubers items on this form (#'s 7001-7999).** Do not order Seeds, Books, or Supplies here.
2. Please fill out the address information above. We must have a road name for UPS shipments.
3. If you order more than 24 items please use our order grid. Call us, we'll send you one.
4. Use the chart below to calculate your shipping charge.
5. You may combine orders to calculate the small order handling charge. Fill out your separate order forms and send them in one envelope. If the combined subtotals do not exceed $50 please enclose **one** $3 handling charge.
6. Consider donating your refund to the MOFGA permanent site fund (see p. 6). Check the appropriate box on the other side.

Suggestions



If your order weighs ☛ And your zip code begins with	1/2 to 5 lbs.	up to 10 lbs.	up to 15 lbs.	up to 20 lbs.	up to 25 lbs.	up to 30 lbs.	up to 35 lbs.	up to 40 lbs.	up to 45 lbs.	over 45 lbs.	over 250 lbs.	over 500 lbs.
030-059	$4.00	$4.75	$5.25	$5.75	$6.35	$7.00	$7.50	$8.25	$8.75	.18/lb.	.13/lb.	call for a quote 207-873-7333
010-029, 060-069, 119-136	$4.25	$5.00	$5.50	$6.50	$7.30	$8.25	$9.00	$10.00	$10.75	.23/lb.	.15/lb.	
070-089, 100-116, 137-227	$4.80	$5.25	$5.80	$6.90	$8.10	$9.25	$10.25	$11.30	$12.50	.27/lb.	.18/lb.	
228-475	$5.05	$5.55	$6.90	$8.00	$9.50	$10.90	$12.25	$13.75	$15.20	.33/lb.	.21/lb.	
476-574	$5.45	$6.35	$7.95	$9.80	$11.75	$13.60	$15.50	$17.35	$18.90	.41/lb.	.25/lb.	
others except AK and HI	$6.35	$8.00	$10.65	$13.55	$16.50	$19.10	$22.50	$24.75	$27.30	.60/lb.	.32/lb.	

Orders to AK and HI are sent Priority Mail. Add 30% of your order total for postage.

Moose Tubers Order Form 1998

Moose Tubers only **7000-7999!** Directions on the other side.

It helps us if these are in catalog number order. Double check your item numbers and weights!

	Item Number	Weight	Variety	Price per	Quantity		Total Wt.	Total Price
EX	7777	0#	Spurious Spud	0.00	3		0#	0.00
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

Volume discounts on orders received by Feb. 13
5% over $100, 10% over $200,
15% over $400, over 2500# call

Add $3 to **one** of the enclosed orders if their combined subtotals do not exceed $50

Totals	
Handling	
Deduct volume discount	
ADJUSTED TOTAL	
Shipping, from chart on reverse side	
GRAND TOTAL	

VISA or MasterCard #

Expiration Date Amount

Name on Card

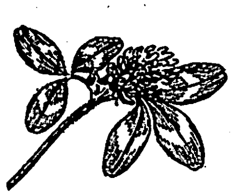
Cardholder Signature

Donate my refund to MOFGA
Up to $3.00 ☐ $5.00 ☐ All ☐

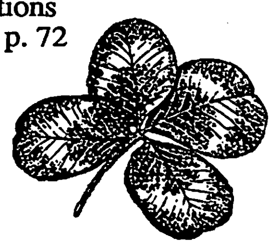
You may pay with VISA or MasterCard, check or money order. Sorry, we do not accept food stamps. You may combine your orders to make one payment, but not to figure discounts. We request payment by check if the total of your orders is under $25. If you pay by credit card, your card will be charged the total of your enclosed orders when we receive them. We will bill or refund you for any adjustments as each order is completed. We cannot charge the adjustments to your credit card. Credit card orders may be faxed. We do not take phone orders.

Fedco, PO Box 520, Waterville, ME 04903-0520

Organic Growers Supply 1998



Descriptions begin on p. 72



From mailing label CC-

Farm or Group Name

Name

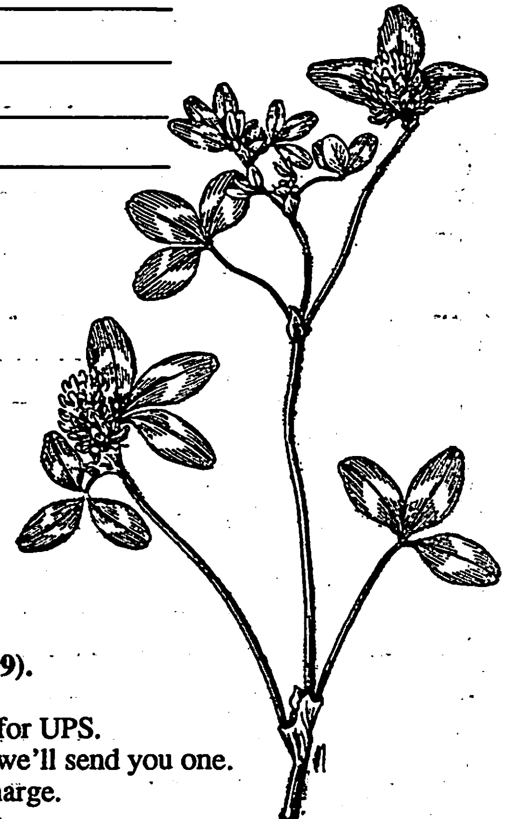
Mailing Address

Town Zip

Road Name (required by UPS)

Town Zip

Telephone



Delivery Options: ✓ check one only

UPS: ☐ regular (first in/first out) Shipping begins Jan. 26.

UPS in April: ☐ with Moose Tubers

Pickup: ☐ early (must order by 1/16)

Pickup: ☐ regular (must order by 2/13)

Pickup: ☐ Moose Tubers (must order by 3/20)

Pickup: ☐ Fedco Tree Sale (must order by 3/20)

Common Carrier ☐ Call for quote.

Other: ☐ Please specify.

1. **Order only Organic Growers Supply items on this form (#'s 8001-9999).** Do not order Seeds, Books, or Moose Tubers here.
2. Please fill out the address information above. We must have a road name for UPS.
3. If you are ordering more than 20 items please use our order grid. Call us, we'll send you one.
4. Use the chart below to calculate your shipping charge. No weight = No charge.
5. If you opt to have your OGS order shipped with your Moose Tubers order, add the weight of your OGS order to your MT order and pay the shipping once on your MT order. Your order will be shipped in April.
6. You may combine orders to calculate the small order handling charge. Fill out your separate order forms and send them in one envelope. If the combined subtotals do not exceed $50, please enclose one $3 handling charge.
7. Consider donating your refund to the MOFGA permanent site fund (see p. 6). Check the appropriate box on the other side.

Suggestions:

If your order weighs ☛ And your zip code begins with	1/2 to 5 lbs.	up to 10 lbs.	up to 15 lbs.	up to 20 lbs.	up to 25 lbs.	up to 30 lbs.	up to 35 lbs.	up to 40 lbs.	up to 45 lbs.	over 45 lbs.	over 250 lbs.	over 500 lbs. call for a quote 207-873-7333
030-059	$4.00	$4.75	$5.25	$5.75	$6.35	$7.00	$7.50	$8.25	$8.75	.18/lb.	.13/lb.	
010-029, 060-069, 119-136	$4.25	$5.00	$5.50	$6.50	$7.30	$8.25	$9.00	$10.00	$10.75	.23/lb.	.15/lb.	
070-089, 100-116, 137-227	$4.80	$5.25	$5.80	$6.90	$8.10	$9.25	$10.25	$11.30	$12.50	.27/lb.	.18/lb.	
228-475	$5.05	$5.55	$6.90	$8.00	$9.50	$10.90	$12.25	$13.75	$15.20	.33/lb.	.21/lb.	
476-574	$5.45	$6.35	$7.95	$9.80	$11.75	$13.60	$15.50	$17.35	$18.90	.41/lb.	.25/lb.	
others except AK and HI	$6.35	$8.00	$10.65	$13.55	$16.50	$19.10	$22.50	$24.75	$27.30	.60/lb.	.32/lb.	

Orders to AK and HI are sent Priority Mail. Add 30% of your order total for postage.

OGS Order Form 1998

OGS items only **8001-9999!** Directions on the other side.

It helps us if these are in catalog number order. Double check your item numbers!

	Item Number	Description	Price per	Quantity		Total Wt.	Total Price
EX	9889	Potrezebie (0#)	0.00	5		0	0.00
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Weight Total

MAINE residents, items 9000-9999
There is no tax for folks outside Maine. 6% ME sales tax

Volume discounts for orders received by Feb. 13
5% over $100, 10% over $250
15% over $800, 20% over $1500
over $3000 call

Add $3 to one of the enclosed orders if their combined subtotals do not exceed $50

SUBTOTAL

Handling

Deduct volume discount

Deduct 5% if picked up

ADJUSTED TOTAL

Shipping from chart on reverse

GRAND TOTAL

VISA or MasterCard #

Expiration Date Amount

Name on Card

Cardholder Signature

Donate my refund to MOFGA
Up to $3.00 ☐ $5.00 ☐ All ☐

You may pay with VISA or MasterCard, check or money order. Sorry, we do not accept food stamps. You may combine your orders to make one payment, but not to figure discounts. Please pay by check if the total of your orders is under $25. If you pay by credit card, your card will be charged the total of your enclosed orders when we receive them. We will bill or refund you for any adjustments as each order is completed. We cannot charge the adjustments to your credit card. You may fax your credit card orders. We do not take phone orders.

Fedco, PO Box 520, Waterville, ME 04903-0520

ANNUAL FLOWERS

Prices for annual flowers #5004-5497:
A=65¢, B=$1.80, C=$5.00.

Evening is the best time to cut flowers, early morning next best, midday the worst. Cut on a slant and remove unnecessary foliage. Place fresh cut stems up to their necks in a bucket of warm water and store in a cool place for several hours.

Seeds per packet for flowers are approximate. They are intended as guides, not guarantees, because we pack by weight, not by count. Available in three sizes except where noted. **Packet weights are listed with each flower.**

Flowers are arranged here by common name. A chart of common uses of flowers is on page 49. An index of botanical names is on p. 56.

ALYSSUM *Lobularia maritima*

Free-flowering ground cover, blossoming from late spring till fall. Has a fragrance like fresh-mown hay. Start seed in cool place 2 mos. before setting out. Needs light to germinate. Transplant seedlings 4-8" apart. Cool growing temperatures preserve color intensity. Easy to grow, likes sun, can tolerate some shade. To extend their season, sheer the plants halfway back four weeks after bloom. Resistant to frost, will tolerate temperatures below 25° F. 90,000 seeds/oz. all types.

5004 Carpet of Snow Great-smelling dwarf white. 4". Introduced prior to 1926. A=.5g, ~1,600 seeds, B=7g, C=28g.

5008 Pastel Carpet Pleasing shades of violet, rose, pink and white. 2½". A=.5g, ~1,600 seeds, B=2g, C=6g.

5012 Elephant Head Amaranth *Amaranthus gangeticus* This 110-year old heirloom has a flair for the dramatic. As one customer put it, "It is a vigorous grower, beautiful in the field and knocks 'em out at farmers markets!" The deep red, almost purple bloom develops a 6-12" "trunk" at its top during August. The plant grows to a height of 3-4' and the bloom is about 12-18" at the base. Seed passed through immigrants from Germany, saved by three generations of gardeners in Idaho, popularized by Seeds of Change®. A=.1g, ~150 seeds, B=.3g, C=1.2g. 42,000 seeds/oz.

5018 Rosea Angel's Breath *Gypsophila elegans* Pretty shell-pink single flowers blossom all summer long on wispy stalks. Start in cool place indoors 2 mos. before setting outdoors or direct sow. Likes full sun and well-drained soil. 30". Good cutflowers. A=.5g, ~1,050 seeds, B=7g, C=28g. 59,000 seeds/oz.

5022 Calliopsis Mix *Coreopsis tinctoria* A low-maintenance rugged flower that brings your garden a splash of fall color with petals brushed in yellow, mahogany and red surrounding mahogany centers. Its large cosmos-like flowers atop 2½' erect stems flourish in full sun and make excellent cut flowers. Good for less cultivated contexts such as open areas, roadsides and borders because it competes well with grasses and reseeds easily. A=.3g, ~220 seeds, B=.9g, C=4.5g. 62,500 seeds/oz.

CHINA ASTER *Callistephus chinensis*

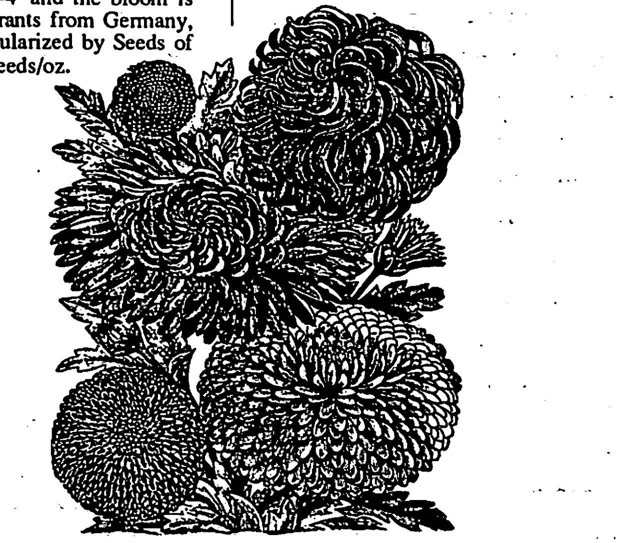
Callistephus is from the ancient Greek *kalli* meaning beautiful and *stephos* meaning crown. According to Jo Ann Gardner in The Heirloom Garden, (#6585 in our books section), the China Aster began its journey to the west around 1730 when a Jesuit missionary noticed it growing in a field near Beijing. By the late 1700s China Asters were among the most cultivated of all flowers. Good as bedding plants or cutflowers. Range of color includes blues, purples, pinks and white. Sow indoors in a warm spot in late winter, transplant after danger of frost. Germination takes 10 days. Cut stems when 2-4 flowers have opened. All types about 13,000 seeds/oz. See also **#5514.**

5024 Early Dawn By far our earliest aster, Early Dawn provides bright splashes of color beginning in July. Will continue prolific bloom production if kept deadheaded. Nothing enriches bouquets like the first asters. 12-18". A=.5g, ~210 seeds, B=2g, C=6g.

5028 Crego Mix Although a week later than Early Dawn, the ostrich feather blooms are richer and seem to hold better in wet and/or cold conditions. 2' plants with 4" diameter flowers. A=.5g, ~250 seeds, B=4g, C=16g.

5032 Princess Mix 2-3" flowers on 2½' wiry stems. The pompon blooms are richly colored with deeply crested centers. Elegant cutflowers which tend to be late bloomers. Still underrated by Fedco customers; these stole the show in our extensive 1994 trial. No other variety can match them in September. A=.25g, ~100 seeds, B=2g, C=8g.

5036 Salmon Compliment Salmon Compliment's clean elegance really stood out among the fifteen asters in our 1995 trial. Bright 4" flowers with short radiated petals salmon tending to pink. 2½' upright plant has strong stems good for cutting. A=.25g, ~110 seeds, B=1g, C=3g.



5040 Sea Star Mix The most stunning aster Nikos has ever grown; she found seed in Germany after years of searching for a source. 2' plant bears fancy "tiger paw" flowers 3½-4" across, with a curled whorl of needle-like petals in a choice mix of lavender, blue, pinks, violet and soft white. Very productive and uniform. Excellent in bouquets and striking in the garden. A=.2g, ~90 seeds, B=.6g, C=3g. 13,000 seeds/oz.

5044 Thunderball Among our 30 trial asters in 1994, Fleuroselect medal winner Thunderball stood out far above the rest in midseason. Its bright red somewhat spiky 3" blooms drew visitors into our flower beds and were great for cutting because of their long 2' stems. The blooms, starting in midseason, maintained peak quality for a long period, almost till frost. A=.25g, ~110 seeds, B=1g, C=3g.

Alan Kapular

As a child growing up in Brooklyn, Kapular was twinly obsessed with orchids and baseball, equally able to reel off lifetime home run statistics or botanical names of obscure flowers. At age 15 he won the Westinghouse National Science Talent Search for his experiments testing the effects of a mutagenic chemical on his beloved orchids. He entered Yale at 16, the youngest student in his class of 1,000 and graduated first in his class. His undergraduate honors thesis earned him the highest grade Yale had ever bestowed and was eventually published in the *Journal of Molecular Biology*. After earning his doctorate in molecular biology at prestigious Rockefeller University he worked with world expert on nucleic acids A.M. Michelson and apprenticed at the lab of future Nobel Prize winner Howard Temin.

Those were heady days of discoveries in his field. He looks back with awe at that time "when the structure of the genetic code was being discovered...it was the greatest self-revelation about our common unity with all organisms. They were the mystery of the ages, and we were uncovering those secrets." Yet Kapular, dismayed by colleagues who were producing lethal viruses for the U.S. government, suddenly left his fast-track career at the University of Connecticut and headed for the west coast with his dog, green van and $1,000. "I had to find my beloved wife and my kids and a life that had a heart." He found Linda Sylvester in Oregon. Together they lived in poverty and he started saving seeds because he was too poor to buy them, eventually collecting more than 6,000 varieties and founding Peace Seeds which later merged with Seeds of Change. Currently he serves as Director of Research for Seeds of Change. His recent breeding work focuses on developing increased amino acid concentration as a way of increasing the nutritional value of food plants.

Kapular once characterized his Peace Seeds catalog as a "Manual for conserving the plant gene-pool of planet Earth." Using computer-generated bubble diagrams he calls "kingrams," he laid out his catalogs in a biological format that shows how groupings of plants are connected to each other. Inspired by the work of Danish biologist Rolf Dahlgren, these maps have given Kapular a sense of direction in his preservation work, pinpointing what's really rare and needs growing.

To Kapular, "Heritage seeds are essential to our heart chakra." They are important not just because they produce a high quality crop or grow fast, but because they carry the message of the people. They are important for the same reason life is important. "We are involved in a process of passing on a heritage of liveness..."

The problem is not hybrids but "ownership of life." Hybridizing, an "essential form of innovation," does not go far enough. The next step is to make open-pollinated lines that stabilize the varieties. Rather than owning them, we must return them to the public domain, giving amateurs access to the gene pool and opportunities to develop new plants.

Much of Kapular's work has centered on de-hybridizing hybrids, taking that next step to create an equivalent open-pollinated variety. Among his successes are True Platinum, an open-pollinated version of Platinum Lady sweet corn, Summer Sun, an open-pollinated form of hybrid patty pan Sunburst and Swan Lake, a development from the hybrid melon Swan.

Through the Seeds of Change catalog, he has popularized a number of heirloom varieties including **Elephant Head Amaranth** and **Hutterite Soup Bean** (which he'd been collecting for 16 years and never tasted until a chance blizzard marooned him and put him in the mood for a hearty bean soup).

Like many who came of age in the turbulent sixties, Kapular could justifiably echo the Grateful Dead's anthem, "What a long, strange trip it's been." Kapular seems to have weathered it as well as any of us.

BACHELOR'S BUTTON *Centaurea cyanus*

Cornflower is great for cutflowers and beds. Their common name may refer to the tight unopened buds' resemblance to buttons or to their popularity as boutonnieres. Was also known as Hurt-Sickle because its wiry stems dulled many a sickle during mowing time. Start in warm place 2 months before setting out or direct seed in May in a sunny location. Make a succession planting in mid-late June if you desire late summer blooms. Will self-sow. Lasts longer than most flowers after frost. Cut when flowers are just beginning to open—they'll open more as they dry in the vase. Thomas Jefferson cultivated Bachelor's Button around 1786. 3'. About 6,000 seeds/oz.

5052 Blue Boy Showy blue. A=1g, ~210 seeds, B=28g, C=112g; 1lb @ $12.00.

5056 Red Boy Deep red. A=1g, ~210 seeds, B=28g, C=112g; 1lb @$12.00.

5060 Mix Blend of blue, pink, red, white flowers with blue predominating. Very showy. A=1g, ~210 seeds, B=28g, C=112g; 1lb @$12.00.

5066 Double Camellia Mix Balsam *Impatiens balsamina* Balsam reigned supreme during the Victorian era but has been neglected for almost a century. Makes a full show of abundant pink, rose & white rosettes along the axils up its stems. Direct seed after danger of frost. Don't cover the seed. Thin to 6-12" for a more spectacular display. Pinch off the side branches and the first flowers to encourage a profusion of blooms near the top of the plant. They will then resemble a ready-made bouquet. 2'. A=1g, ~120 seeds, B=7g, C=28g. 3,300 seeds/oz.

5068 Basketflower *Centaurea americana* Outstanding fluffy pinkish lavender "ostrich plume" flowers bloom all summer, attracting butterflies. Sometimes called "thornless thistle," these 4-5" blossoms open in the morning and close at midday to a woven basket form. As a cutflower they have a 3-day vase life, providing special interest as they continue to open and close. Soak seeds overnight and direct seed. 3-4'. Seed organically grown in Maine by Susan Belding at Old Stage Farm. A=.5 gram ~35 seeds, B=1.5g, C=6g. 2,000 seeds/oz. NEW!

5072 Indian Summer Black-Eyed Susan *Rudbeckia hirta* With so many wild Black-Eyed Susans growing in our fields, why buy seed for them? You won't find any wild ones that look like 1995 AAS Indian Summer, whose enormous five-petaled 6-9" golden yellow blooms are more reminiscent of sunflowers than Susies. Indian Summer grows up to 3' but branches so that staking is not necessary. Its long stems make excellent cutflowers which have good staying power in the vase. Start indoors for early blooms. Will survive light fall frosts. Bred by Fleck of Germany. A=.1g, ~140 seeds, B=.3g, C=1,2g. 41,000 seeds/oz.

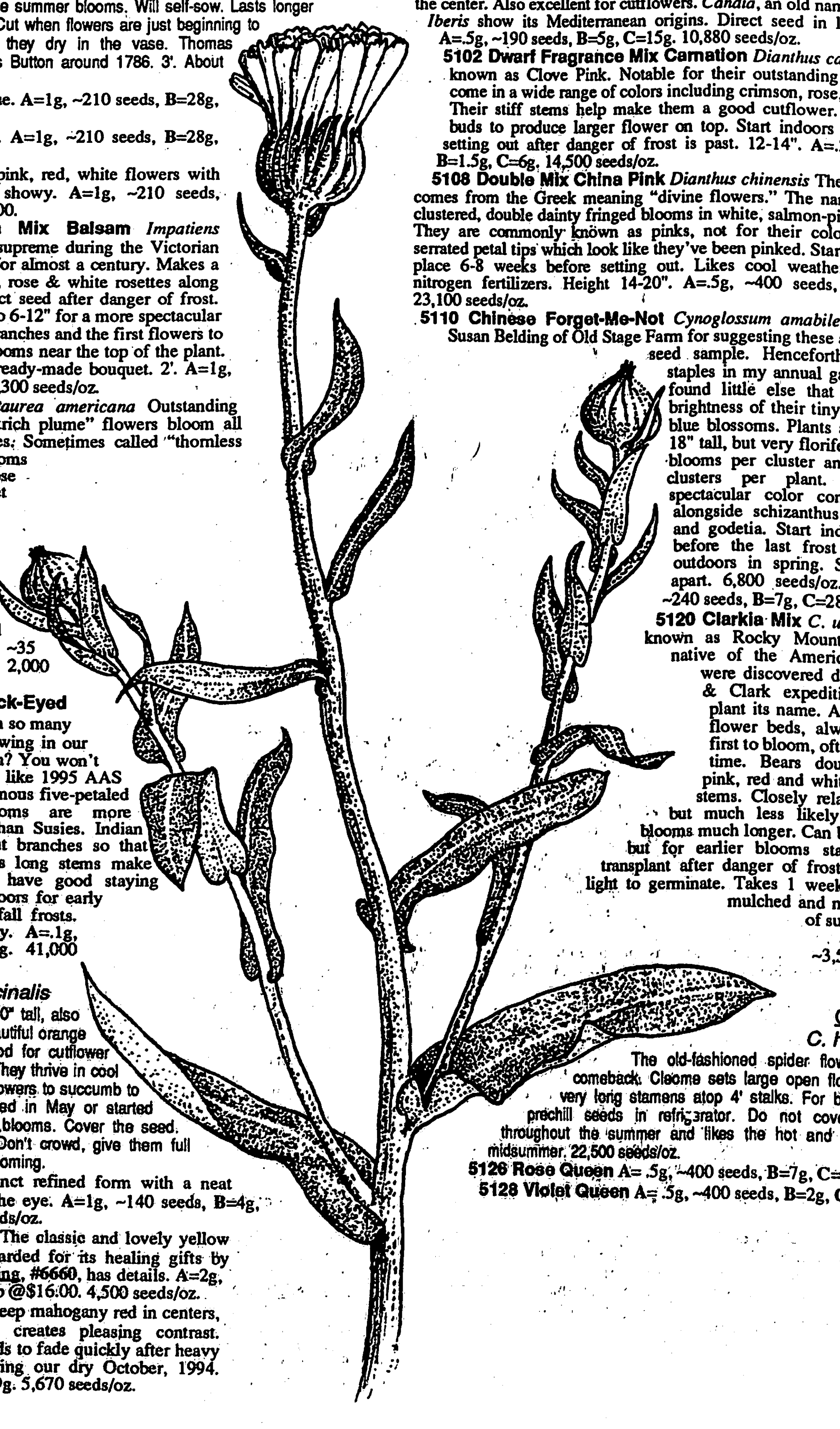
CALENDULA *C. officinalis*

Old kitchen garden flower, 18-20" tall, also known as pot marigold. The beautiful orange and yellow double flowers, good for cutflower arrangements, are also edible. They thrive in cool weather, being one of the last flowers to succumb to fall frosts. Can be direct seeded in May or started indoors in cool place for early blooms. Cover the seed. Germination takes 4-10 days. Don't crowd, give them full sun. Deadhead to keep blooms coming.

5080 Kablouna Mix Distinct refined form with a neat crested center not showing the eye. A=1g, ~140 seeds, B=4g, C=12g; 1oz @8.00. 4,000 seeds/oz.

5084 Pacific Beauty Mix The classic and lovely yellow and orange mix. Highly regarded for its healing gifts by herbalists. The Roots of Healing, #6660, has details. A=2g, ~300 seeds, B=14g, C=56; 1lb @$16.00. 4,500 seeds/oz.

5088 Touch of Red Mix Deep mahogany red in centers, on petal backs and edges creates pleasing contrast. Excellent for cutflowers. Tends to fade quickly after heavy rains, but was gorgeous during our dry October, 1994. A=1g, ~200 seeds, B=3g, C=9g. 5,670 seeds/oz.



Prices for annual flowers #5004-5497:
A=65¢, B=$1.80, C=$5.00.

5094 Canary Creeper *Tropaeolum peregrinum* A climbing relative of the nasturtium. With a little coaxing, profuse vines can climb 8', providing golden-yellow flowers late in the season. Grows in shade but prefers full sun. A=1g, ~15 seeds, B=7g, C=28g. 420 seeds/oz.

5098 White Pinnacle Candytuft *Iberis odorata* Makes a lovely border plant with its show of fragrant white blossoms with small green buttons in the center. Also excellent for cutflowers. *Candia*, an old name for Crete, and *Iberis* show its Mediterranean origins. Direct seed in late spring. 20". A=.5g, ~190 seeds, B=5g, C=15g. 10,880 seeds/oz.

5102 Dwarf Fragrance Mix Carnation *Dianthus caryophyllus* Also known as Clove Pink. Notable for their outstanding fragrance, they come in a wide range of colors including crimson, rose, pink and white. Their stiff stems help make them a good cutflower. Remove lateral buds to produce larger flower on top. Start indoors 8 weeks before setting out after danger of frost is past. 12-14". A=.3g, ~150 seeds, B=1.5g, C=6g. 14,500 seeds/oz.

5108 Double Mix China Pink *Dianthus chinensis* The name Dianthus comes from the Greek meaning "divine flowers." The name well fits the clustered, double dainty fringed blooms in white, salmon-pink and crimson. They are commonly known as pinks, not for their color, but for their serrated petal tips which look like they've been pinked. Start indoors in cool place 6-8 weeks before setting out. Likes cool weather. Avoid heavy nitrogen fertilizers. Height 14-20". A=.5g, ~400 seeds, B=7g, C=28g. 23,100 seeds/oz.

5110 Chinese Forget-Me-Not *Cynoglossum amabile* Our thanks to Susan Belding of Old Stage Farm for suggesting these and sending us a seed sample. Henceforth they will be staples in my annual garden for I have found little else that can match the brightness of their tiny 5-petaled azure blue blossoms. Plants are small, about 18" tall, but very floriferous, with three blooms per cluster and a half dozen clusters per plant. To create a spectacular color contrast try them alongside schizanthus near candytuft and godetia. Start indoors six weeks before the last frost or direct seed outdoors in spring. Space plants 9" apart. 6,800 seeds/oz. NEW! A=1g, ~240 seeds, B=7g, C=28g.

5120 Clarkia Mix *C. unguiculata* Also known as Rocky Mountain Garland, a native of the American west. Most were discovered during the Lewis & Clark expedition, giving the plant its name. A standout in our flower beds, always one of the first to bloom, often lasting a long time. Bears double flowers of pink, red and white along 2' erect stems. Closely related to Godetia, but much less likely to lodge, and blooms much longer. Can be direct seeded, but for earlier blooms start indoors and transplant after danger of frost is past. Needs light to germinate. Takes 1 week at 60°F. Keep mulched and moist in the heat of summer for longer blooms. A=1g, ~3,500 seeds, B=7g, C=28g. 98,000 seeds/oz.

CLEOME
C. hasslerana

The old-fashioned spider flower has made a comeback. Cleome sets large open flower clusters with very long stamens atop 4' stalks. For better germination, prechill seeds in refrigerator. Do not cover seed. Blooms throughout the summer and likes the hot and dry conditions of midsummer. 22,500 seeds/oz.

5126 Rose Queen A=.5g, ~400 seeds, B=7g, C=28g.

5128 Violet Queen A=.5g, ~400 seeds, B=2g, C=8g.

COSMOS *spp.*

Sun-loving, free-flowering all summer, can serve as an accent, screen or cutflowers. For best results, thin its fast-growing large plants. Germinates in 1 week at 75°. Light aids germination. 3,900 seeds/oz. See also #5552.

5134 Bright Lights Mix *C. sulphureus* A bright mixture of yellow and gold shades reaching 3'. Not frost hardy. A= 1g, ~140 seeds, B=7g, C=28g; 4oz, $10.00.

5136 Picotee *C. bipinnatus* A unique bicolor cosmos for the aficionado. Flowers vary in hue from white to pink to rose, with each serrated petal edged in contrasting magenta. Bright golden centers. Plants grow 4' climaxed by blooms 2½-3" across. A nice addition to your cosmos bouquet. A=.5g, ~60 seeds, B=3g, C=15g; 1oz @$10.00. 3,500 seeds/oz.

5139 Sea Shells *C. b.* If each petal on an Early Sensation were to curl into a tube, they'd have the striking delicate look of a Sea Shells. 3' plants come in the usual mix of red, pink and white shades, each with a yellow button eye. A lovely cosmos. A=.5g, ~85 seeds, B=3g, C=12g; 1oz @$8.00. About 5,000 seeds/oz.

5140 Sensation Mix *C. b.* So named because its early maturity created a sensation when it first came out. 1936 AAS. Largest flowered cosmos variety needs little tending. One of the last to give in to frost, will flower 10 weeks after direct seeding. Pinks, reds, purples and occasional whites. 4-5'. Our most popular flower. A=1.4g, ~195 seeds, B=14g, C=56g; 1lb @$18.00.

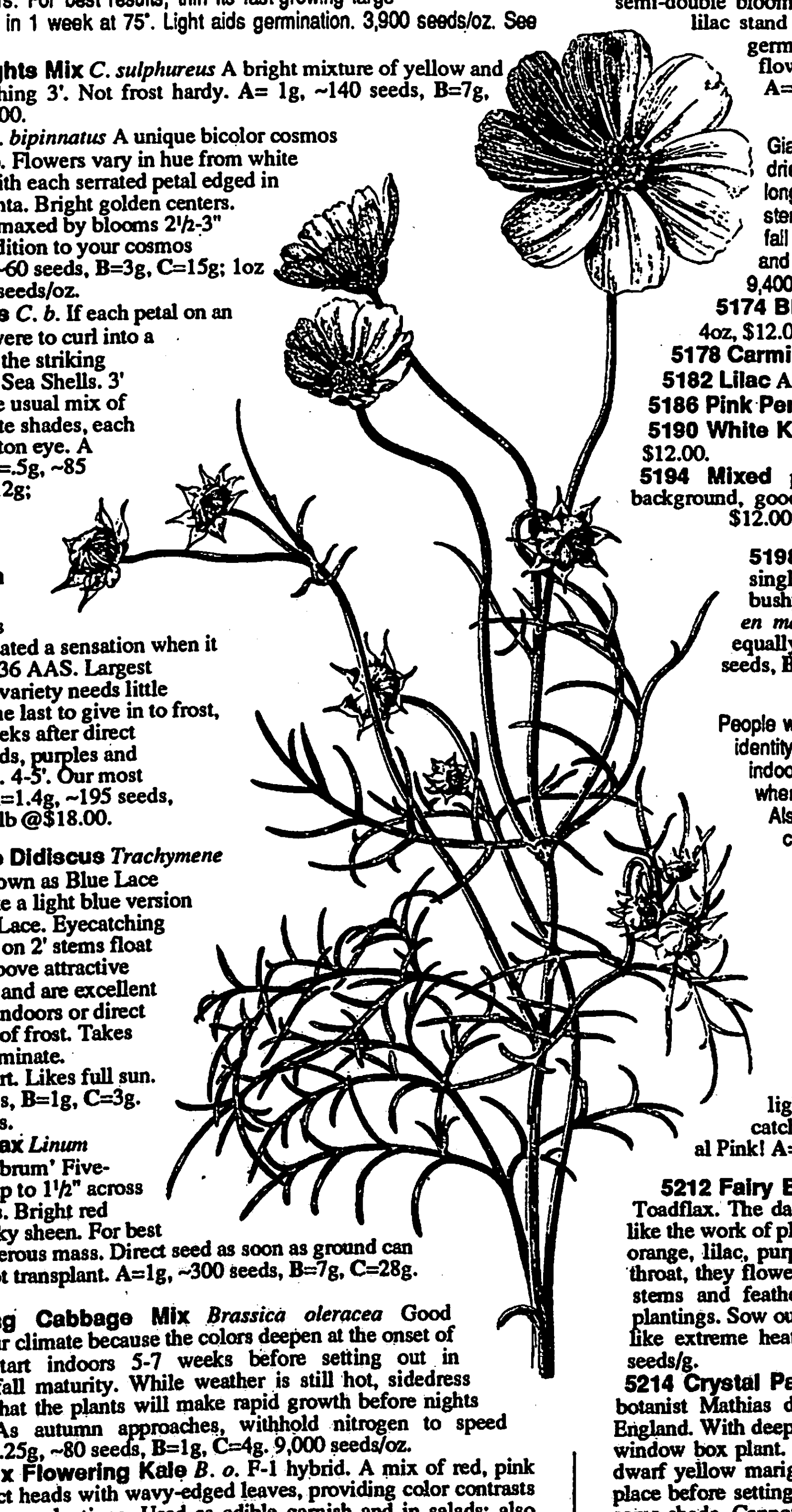
5144 Lacy Blue Didiscus *Trachymene coerulea* Also known as Blue Lace Flower. Looks like a light blue version of Queen Anne's Lace. Eyecatching airy flower heads on 2' stems float like a blue mist above attractive finely-cut foliage and are excellent for cutting. Start indoors or direct seed after danger of frost. Takes 14-21 days to germinate. Transplant 8" apart. Likes full sun. A=.25g, ~90 seeds, B=1g, C=3g. 1 oz=10,300 seeds.

5150 Scarlet Flax *Linum grandiflorum* 'Rubrum' Five-petalled blooms up to 1½" across on bushy 1' plants. Bright red flowers with a silky sheen. For best effect grow a generous mass. Direct seed as soon as ground can be worked. Do not transplant. A=1g, ~300 seeds, B=7g, C=28g. 8,400 seeds/oz.

5156 Flowering Cabbage Mix *Brassica oleracea* Good ornamental for our climate because the colors deepen at the onset of cold weather. Start indoors 5-7 weeks before setting out in midsummer for fall maturity. While weather is still hot, sidedress with manure so that the plants will make rapid growth before nights begin cooling. As autumn approaches, withhold nitrogen to speed coloring. 10". A=.25g, ~80 seeds, B=1g, C=4g. 9,000 seeds/oz.

5160 Osaka Mix Flowering Kale *B. o.* F-1 hybrid. A mix of red, pink and white compact heads with wavy-edged leaves, providing color contrasts for accent or pattern plantings. Used as edible garnish and in salads; also called salad savoy. Prefers cool weather. Culture same as for flowering cabbage. 8". A=.5g, ~250 seeds, B=2g, C=6g. 14,500 seeds/oz. See also #5566-5570.

5164 Tall Mix Four O'Clock *Mirabilis jalapa* Also known as Marvel of Peru. The fragrant trumpet-shaped flowers open in late afternoon, reaching peak loveliness at dusk when they appear to glow. The 2-3' plants make good background or annual hedge. Start indoors, transplant out when warm weather has settled in. Likes full sun. Will self sow in warmer areas. A=3g, ~50 seeds, B=9g, C=27g. 520 seeds/oz.



Prices for annual flowers #5004-5497:
A=65¢, B=$1.80, C=$5.00.

5170 Dwarf Double Azalea Mix Godetia *Clarkia amoena* Also known as Farewell to Spring. So lovely, deserves to be better known. Frilly delicate double and semi-double blooms on 16" stems in pastel shades of pink, red, rose and lilac stand out in bouquets. Direct seed in early May. Light aids germination. Wonderful in borders, benefits from taller flowers in the background to form contrast, give support. A=.7g, ~2,200 seeds, B=7g, C=28g. 89,500 seeds/oz.

LARKSPUR *Consolida orientalis*

Giant Imperial, 3'. Long flower spikes are used as cutflowers or in dried arrangements. Delphinium-like flowers on upright long-stemmed plants. Cut when one third of the flowers on the stem are open. Likes cool, moist conditions. Very slow to give in to fall frosts. May be direct seeded in early spring or started indoors and set out in 8 weeks. Germinates in 21 days. All types about 9,400 seeds/oz.

5174 Blue Spire Dark-blue. A=1g, ~330 seeds, B=7g, C=28g; 4oz, $12.00

5178 Carmine A=1g, ~330 seeds, B=7g, C=28g; 4oz, $12.00.

5182 Lilac A=1g, ~330 seeds, B=7g, C=28g; 4oz, $12.00.

5186 Pink Perfection A=1g, ~330 seeds, B=7g, C=28g; 4oz, $12.00.

5190 White King 1937 AAS. A=1g, ~330 seeds, B=7g, C=28g; 4oz, $12.00.

5194 Mixed pinks, purples, blues and white make a beautiful background, good for cutting. A=1g, ~280 seeds, B=7g, C=28g; 4oz, $12.00.

5198 Blue Cloud *C. regalis* Blue Cloud doesn't shoot up a single spike like most larkspurs. Instead it sends flocks of bushy 5-petaled rich blue ½" florets on wispy foliage which, *en masse*, give the effect of clouds. Its tiny seed pods are equally decorative. Will self-sow vigorously. A=.1g, ~80 seeds, B=.5g, C=2g. 22,800 seeds/oz.

LAVATERA *L. trimestris*

People who are seeing my garden for the first time always ask for the identity of this flower so they can grow it the following year. Start indoors 8 wks before setting out, or direct seed in sunny spot. Cut when flowers have just begun to bloom. Will survive light fall frosts. Also known as Herb Treemallow; botanical name honors the 16th century Swiss naturalist brothers Lavater, and the three-month bloom time in warmer climes. 4,200 seeds/oz.

5202 Pink An explosion of exotic pink blooms on 2' tall bushy plants great for borders. Lasts in bouquets after most others have shrivelled. A=1g, ~150 seeds, B=4g, C=16g.

5206 Mont Blanc Slightly dwarf (20") hybrid with white blossoms. Fleuroselect medal winner. Too short for commercial cutting, but nice in borders. Looks great planted alongside Pink Lavatera. A=.5g, ~75 seeds, B=2g, C=6g.

5210 Tanagra Extra-large deep rose flowers with lighter veining borne on robust 3' plants. For an eye-catching combination, plant Tanagra alongside our traditional Pink! A=1g, ~150 seeds, B=4g, C=12g.

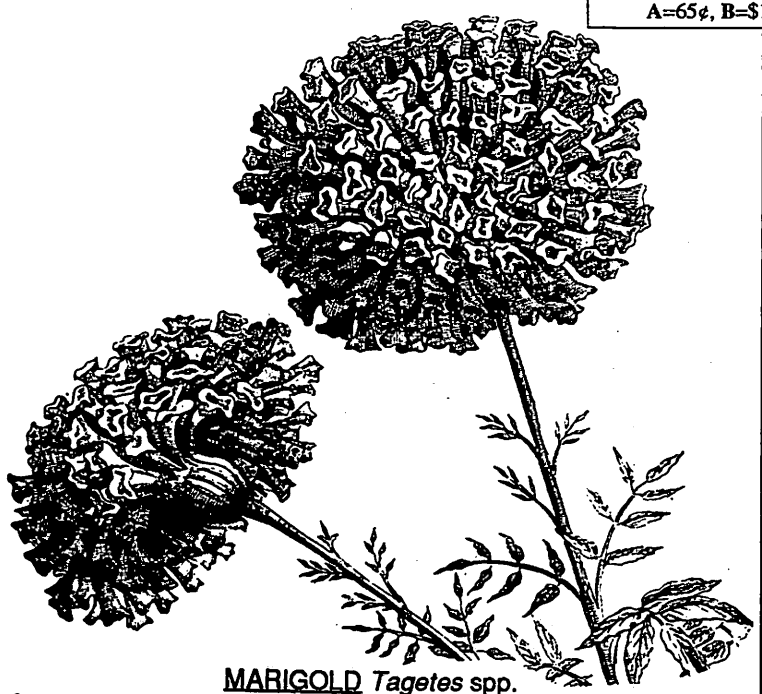
5212 Fairy Bouquet Mixed Linaria *L. maroccana* Also known as Toadflax. The dainty blooms, resembling small snapdragons, really look like the work of plant fairies. Coming in a wide range of colors (rose, pink, orange, lilac, purple, white and soft yellow), each with a pollen-yellow throat, they flower early and last until early August. With fully branched stems and feathery foliage, they are good along borders in massed plantings. Sow outdoors as soon as the ground can be worked. They don't like extreme heat. NEW! A=.1g, ~1,300 seeds, B=.5g, C=3g. 13,000 seeds/g.

5214 Crystal Palace Blue Lobelia *L. erinus* Named for the Flemish botanist Mathias de L'Obel who was a physician to King James I of England. With deep blue flowers on bronze-green foliage, this is the perfect window box plant. 4" tall, great for edgings, walks and borders. Mix with dwarf yellow marigolds for a spectacular contrast. Sow indoors in a cool place before setting out, or in planters. Needs light to germinate. Tolerates some shade. Cannot stand frost. A=.2g, ~5,000 seeds, B=1g, C=4g. 26,400 seeds/g.

5218 Loves-Lies-Bleeding *Amaranthus caudatus* Also known as Tassel Flower. This vigorous 2-4' branching annual sports long drooping red tassels which hold until frost. Makes a good border; stake and tie for neater appearance. Sow indoors 5-6 wks before last frost. Needs light to germinate. A=1g, ~1,500 seeds, B=7g, C=28g. 43,000 seeds/oz.

5224 High Mallow *Malva sylvestris* var. *mauritania* First caught my eye as a volunteer in one of my compost piles, a refugee from a distant flower garden. Bears striking large single fuchsia saucer-shaped flowers with dark veins. An outstanding blue ribbon specimen at the 1994 Common Ground Fair captivated all who saw it. This is a large plant—about 3' across and 4' high—so give it plenty of room in a focal point in your garden. Biennial usually grown as an annual; will often flower the first year. A=.15g, ~15 seeds, B=.6g, C=1.8g. 2,800 seeds/oz.

Prices for annual flowers #5004-5497:
A=65¢, B=$1.80, C=$5.00.



MARIGOLD *Tagetes* spp.

Good for bedding, in planters, or low borders. Grown in Brazil 400 years ago, said to have been sacred to the Aztecs. In 1939 Burpee's Red and Gold hybrid was the first hybrid flower from seed to be offered commercially in the United States. Sow after soil has warmed, or inside in a warm spot, 3 weeks before setting out. Likes full sun. About 9,000 seeds/oz. See also **#5601-5616.**

5228 Aurora Yellow Fire *T. patula* Bright yellow flowers inset with red flames fanned the flames of our enthusiasm for this French beauty. Extra early with numerous large flowers, consistently double from the first bloom to the last. The compact neat rounded 8-10" plants bear flat-petaled 2½" blooms. Not daylength sensitive. **NEW!** A=.25g, B=1g, C=4g.

5230 Brocade Mix French Dwarf Double *T. p.* Abundant color on neat, compact 10" plants. Ruffled flowers in rust, yellow, orange, red & bicolors. A=.5g, ~165 seeds, B=7g, C=28g; 4oz, $10.00.

5234 Sparky Mix French Dwarf Double *T. p.* Combines yellow, gold, orange and red blooms on free flowering compact 10-12" plants. Flowers are 2-2½" wide with smoother petals than Brocade. A=1g, ~300 seeds, B=7g, C=28g; 4oz, $10.00.

5238 Lemondrop French Dwarf Double *T. p.* A beautiful true yellow extra dwarf crested variety. Blooms early, through summer into fall. Start 3 weeks before setting out, or direct sow. A=.5g, ~320 seeds, B=1.5g, C=4.5g.

5240 Striped Marvel *T. p. nana* If you've become blasé about marigolds because they all seem to look alike, you probably haven't encountered the striped ones yet. Whether called Pinwheel, Harlequin, or Striped Marvel, these varieties jump out at you with their intense color variations, juxtaposing yellows and maroons in arresting patterns. Grows up to 2'. **NEW!** A=1g, B=7g, C=28g.

5244 Lemon Gem *T. tenuifolia pumila* Compact 10-12" plant bears tiny bright lemon-yellow flowers early, through summer, into fall. Blooms are edible with lemony scent. Start 3 weeks before setting out, or direct sow. A=.5g, ~600 seeds, B=1.5g, C=4.5g. 35,000 seeds/oz.

5248 Tangerine Gem *T. t. p.* As above, except the tiny fragrant flowers are deep orange. They make colorful tasty additions to salads. If you cut them, they'll keep coming. A=.5g, ~600 seeds, B=1.5g, C=4.5g.

5252 Tall African Crackerjack Mix *T. erecta* A tall (30") carnation-flowered type. Early mix of orange, gold, yellow. Large, fully doubled flowers rarely need staking. A=1g, ~320 seeds, B=14g, C=56g; 4oz, $7.00.

5258 Torch Mexican Sunflower *Tithonia rotundifolia* These 4' plants bear reddish-orange 4-5" blooms which hummingbirds find extremely attractive. My fondness for this showy flower is shared by our customers who purchased over 900 packets in 1997. 1951 AAS. A=.2g, ~20 seeds, B=.6g, C=1.8g. 2,800 seeds/oz.

5262 Mignonette *Reseda odorata* Imagine an afternoon garden party with the haunting scent of raspberries wafting through the air. Guests will look for some showy bloom and little suspect the insignificant yellow-green blossoms. Less than a foot high, it can be grown in pots and moved for best effect; however its scent will fade if it is removed from full-day sun. Prefers fertile, well-drained soil and cool weather. Once considered fashionable on the balconies of Paris, Mignonette is still grown in Holland for European cutflower markets. Louise Beebe Wilder (see our book section, #6547) said that few flowers have attained greater fame or been so loved as Mignonette. A=1g, ~900 seeds, B=4g, C=16g. 25,500 seeds/oz.

MORNING GLORY *Ipomoea* spp.

Easily grown climber with trumpet-shaped flowers provides color & shade. Decorates fence or post. Soak seeds overnight before sowing. Plant with NE to SE exposure for best results. Nick seeds with a file and soak overnight to speed germination. Germinates in 1 week at 75-80° F. Sow outdoors after danger of frost or indoors in jiffy pots as they resent transplanting. Overly rich soil will yield excess foliage and sparse blooms. A=3.5g, ~80 seeds. 675 seeds/oz.

5272 Clarke's Heavenly Blue *I. tricolor* Old favorite predates 1911. Intense blue lightens toward center; a sun-loving vine. 12'. A=3.5g, ~80 seeds, B=14g, C=56g; 1lb @$16.00.

5276 Scarlett O'Hara *I. nil* Very large wine-red flowers on 10' vines. 1939 AAS. A=3.5g, ~80 seeds, B=14g, C=56g.

NASTURTIUM *Tropaeolum majus*

Edible flowers lend a peppery taste to salads, with each color adding contrast and subtle variations in flavor. Blooms keep coming if cut. Round leaves also edible. Was formerly used as a remedy against scurvy. Needs warmth to germinate, but cool temperatures outdoors for continuous blooming. Intolerant of frost. Avoid excess nitrogen, but don't believe the myth that nasties thrive best in poor soil. Like full sun. About 200 seeds/oz. all types. See also **#5625.**

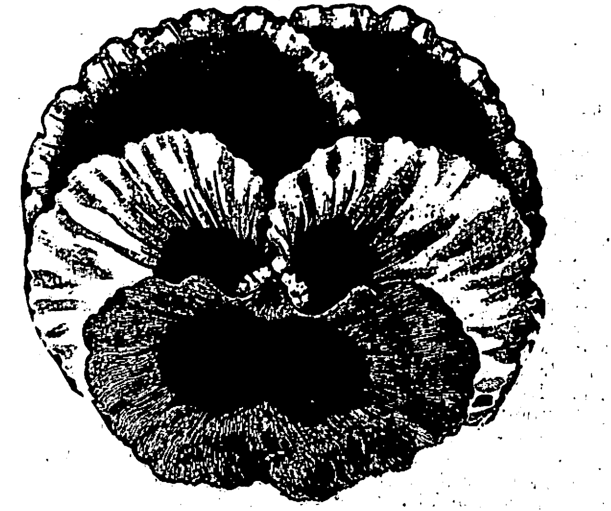
5280 Alaska Mix This eye-catcher has variegated green and white foliage. If you feed it heavily it will make a formidable bush, but if you want to eat its tangy yellow and orange blossoms you will have to go easy on the nitrogen. A great plant for hanging baskets. 16". A=2g, ~16 seeds, B=8g, C=24g; 1lb @$40.00.

5284 Empress of India Hailed as a "great novelty" when introduced in 1884, and still popular today. Stems and leaves have a red toning that gives the plant a lovely olive color. Attractive scarlet flowers are spicy hot. Darker coloring makes a delightful contrast in your nasturtium patch. Do not feed heavily. 16" plants. A=3g, ~22 seeds, B=9g, C=27g; 1lb @$38.00.

5288 Jewel Mix Bushy variety holds bloom above foliage. Early free-flowering blend of colors. Blooms 6 weeks after sowing & continues until frost. 16". A=4g, ~25 seeds, B=16g, C=64g; 1lb @$18.00.

5292 Whirlybird 7-Color Blend *T. minus* Has large spurless upward-facing flowers borne above the foliage. Compact non-trailing plant habit. Recommended for commercial growers. 12" plants. A=2g, ~12 seeds, B=6g, C=24g; 1lb @$40.00.

5296 Tall Climbing Mix Tall trailing mix to 2' in red, orange, gold and exquisite bicolor shades. Each different colored blossom has its own distinctive taste. Plants will spread but having no tendrils cannot, strictly speaking, climb. *The most prolific blossom set of any of the nasturtiums we have tried.* A=4g, ~25 seeds, B=28g, C=84g; 1lb @$18.00.



5306 Swiss Giant Regular Mix Pansy *Viola* x *wittrockiana* Blotched flowers in a wide range of colors, with best color in cool of spring, 6" plants good for bedding or borders. Not recommended for commercial growers. Start 2 months prior to planting in a cool place. Likes partial sun. A=.1g, ~70 seeds, B=1g, C=4g. 20,000 seeds/oz.

5312 Drummondii Mix Phlox *P. drummondii* Their name honors Thomas Drummond, a British naturalist who "discovered" them in Texas during the 1820s or 1830s and sent seed back home. Among the most colorful annuals for summer and fall beds, borders or window boxes. A large-flowered mix of crimson, scarlet, pink, white and salmon with white eyes. Start early indoors or direct sow in spring. Likes moist, well-drained soil in full sun. One of the longest lasting in the vase. About the last to succumb to frost. 6-8". A=.4g, ~200 seeds, B=2g, C=8g. 14,000 seeds/oz.

5316 Imperial Mix Pincushion Flower *Scabiosa atropurpurea* Excellent old-fashioned cutflower that deserves to experience a revival. Flowers are perfect 1" mounds of tiny blossoms with a sweet smell. Blend of crimson, rose, lavender and white, on long stems. Among my favorites. Grows to 3', or pinch to induce bushiness. Start indoors 4 to 5 weeks before last frost. A=.5g, ~40 seeds, B=3g, C=15g. 2,400 seeds/oz.

POPPY *Papaver* spp.

Sensuous luxurious flowers, about 2½-3' tall. Need light to germinate. Sow outside after frost or sow in fall for earlier blooms next summer. Thin to 9-12". Likes full sun. Will self sow. Seeds also useful in the kitchen. Poppies make wondrous cut flowers: Choose buds that have straightened up but not quite opened. Immediately sear the cut stem—we use a lighter—and put in water. Poppies open after several hours–a sparse bouquet in the evening can become a riot of colors by the next morn. All types 200,000 seeds/oz.

5320 Carnation Crop failure. *Not available in 1998*. We hope to have back in 1999.

5324 Elka An unusual double-purpose poppy sporting enormous seed heads up to 1½" wide and 2" high in good years, somewhat smaller in drought. About 75% of the seed heads are unvented so that the seed is not broadcast. From Chrenovec in central Slovakia, once used as a walnut substitute in their cuisine. Fifty or more years ago, families grew both the black Breadseed poppy and white-seeded Elka, and collected 50 kilograms of each for a year's cooking. When walnuts became widely available in stores, Elka almost completely disappeared. Named in honor of the old woman on a mountainside in Slovakia who is the last one left who continues to grow the variety in her area. Lacks the distinctive flavor of the Breadseed variety but is sweeter, with a more nutlike taste and none of the bitterness, and over 50% more oil content, making perhaps the best quality edible oil in central Europe. Plants grow 4' with white-lavender blossoms, like calcium-rich soil, don't transplant well. For best results thin to at least 5-6" apart. Some folks tie a group of plants together for support against wind breakage. Isolate from other poppies by at least 250' if you wish to save seed from your plants. Seed grown in Maine. A=.1g, ~700 seeds, B=.3g, C=1.2g.

5328 Ziar Breadseed The twin to Elka, most unusual in that it has been bred to eliminate the vents in its large seed head, enabling the black seeds to stay in the heads to be collected. Ornamental single lavender petals with centers ranging from pale red through dark colors. Although the first batch of seeds had some difficulty adapting to the cold climates of Canada and Maine, Ziar has been selected over the past 16 years for better cold survival. Slovakian variety once a mainstay in their cuisine. Seed grown in Maine. A=.1g, ~700 seed, B=.3g, C=1.2g.

5334 Large Lavender Passed along to Jeanne Griffin by a German friend, these tall poppies bloom in July with 2½ to 3" flowers that have exquisitely shaded and fringed petals. A real eye-opener with a long blooming period. Large 1" seed pods can be used in dried arrangements. Seed grown in Maine without herbicides, pesticides or chemical fertilizers. A=.2g, ~1,400 seeds, B=1g, C=7g.

5346 Shirley Double Choice Mix Also known as Corn Poppy. Elegant blooms all summer in shades of pink, rose, salmon, scarlet and white. The name Shirley refers to the town in Surry, England, where the Rev. Henry Wilkes originally raised the variety. A=.7g, ~4,900 seeds, B=7g, C=28g.

5352 Mission Bells California Poppy *Eschscholzia californica* Colorful, semi-double 2-3" orange flowers, occasionally yellow or pink. Excellent for borders, rock gardens, bedding. Likes full sun. Do not transplant. Direct seed in May after soil has begun warming. Make succession plantings for blooms all summer. 2'. A=.5g, ~325 seeds, B=2g, C=6g. 18,300 seeds/oz.

5362 Salvia patens Hard to say whether magificent blue blossoms or dynamic flower shape is this salvia's most exciting feature. Clear bright flower spikes are one shade lighter than cobalt blue. Each flower on the monkshood-like spike has a top petal "hood" that lunges across the pendant lower petals. Nikos and Susan marveled at these 2½' plants last summer at Rockefeller Gardens on Mount Desert Island. Flower spikes 12-15" long, good for cutting. Tender perennial, can be grown as an annual in the North. Start inside in February at 55-60°. Do not cover seed. Takes 21 days to germinate. **NEW!** A=.1g ~13 seeds, B=.3g, C=1.2g. 3,700 seeds/oz.

5363 Signum Blue Salvia *S. farinacea* If you want masses of true blue in your annual beds, Signum Blue is for you. Brilliant blue blossoms showed deeper color than Blue Bedder in our 1996 salvia trials. Compact 12-18" plants with grey-green foliage have long-lasting 6-8" high flower spikes that bloom all at once and last for weeks. Start indoors in a warm place 4-6 weeks before last frost. Do not cover seed. Plant outdoors after danger of frost. Keep fairly dry for best foliage color. Replaces Blue Bedder. **NEW!** A=.1g ~90 seeds, B=.3g, C=.9g. 25,000 seeds/oz.

5365 Angel Wings Schizanthus *S. pinnatus* Bring a hint of the exotic to your garden by growing this colorful array of delicate orchid-like flowers with pansy faces. Softly complimentary shades of pink, violet and rose with contrasting blotched and stippled throats create the effect of an 18" fern covered by rare little butterflies. Bring cut sprays of bloom indoors for a touch of Victorian charm. Also known as Butterfly Flower or Poor Man's Orchid. Do not cover the fine seed, but do cover the flats or pots with a sheet of black plastic because darkness aids germination. Takes 3-4 weeks to germinate. A=.2g, ~390 seeds, B=1g, C=5g. 55,000 seeds per oz.

5368 Panorama F2 Snapdragon *Antirrhinum majus* Non-hybrid produced from hybrid parents. High-quality blended mix shows golden yellow, rose, orchid, bronze, red and white flowers with soft fragrance. 20" plants bloom a long time. Refrigerate seeds, then expose to light to germinate. Sow indoors in cool place 8-10 weeks before setting out. A=.2g, ~1,460 seeds, B=3g, C=12g. 211,700 seeds/oz. See also **#5666.**

Prices for annual flowers #5004-5497:
A=65¢, B=$1.80, C=$5.00.

5374 Dwarf Ten Weeks Mix Stock *Matthiola incana* Formula blended. Dwarf plant reaches 12-14". Each produces abundant flowers which really come into their own in the cool of September. Light and dark blue, white, pink and red blossoms for bedding and cutflowers. For earlier blooms sow indoors 6 to 8 weeks before setting out after danger of frost. Don't cover the seed. A=.4g, ~250 seeds, B=2g, C=12g. 18,000 seeds/oz.

SUNFLOWER *Helianthus annuus*

Native to the Americas and revered by Peruvian Incas, sunflowers are enjoying a tremendous popularity revival. Thanks to the folks at Loon Song Farm, who have trialed over 40 different varieties for us since 1994, we've diversified our selection so that you can enjoy a full range of colors, shapes, heights and bloom times. Prized for their seeds by humans and birds, sunflowers also add a lighthearted touch to gardens. Prechilling seed aids germination. Easy to grow. Direct sow after last frost, 3 to a pocket. Thin to best plant, 1' or more apart. Rich friable soil yields tallest plants, drought stunts growth. See also **#5668-5669.**

5400 Autumn Beauty Mix Tall 6-8' multibranching sunflower produces a lovely mixture of earthen shades. Petal colors range from bright yellow to bronze and purples; most have a characteristic red ring enclosing a black center. Blossoms 4-6" across are perfect as the center of giant flower arrangements. Has pollen. A=1g, ~45 seeds, B=3g, C=12g; 1lb @$28.00. 1,300 seeds/oz.

5404 Floristan Spectacular Fleuroselect winner produces distinctive mahogany blooms on 18" branches from a 3' central stalk. Petals appear bleached at the tips and darken toward the center. Brownish-black centers with outer ring of gold contrast with the mahogany. Has pollen. Seed for this unique sunflower is very expensive. A=.25g, ~11 seeds, B=1g, C=4g. 910 seeds/oz.

5408 Mammoth Grey Stripe A traditional variety of giant (6-12') single-stem sunflower with large seed heads. Beloved by birds and kids. A=28g, ~250 seeds, B=84g, C=336g; 1lb @$6.00.

5410 Lemon Queen Tall Lemon Queen is the latest winner from Donna Dyrek's sunflower trials. Luxuriant 8" blooms with lemon yellow petals surrounding striking solid brown centers. Although it can grow up to 10' tall in rich soil, its powerful stems do not lodge. Likes high fertility; makes shorter stems and narrower petals in average soil. Not early; bloomed for Donna in late August. **NEW!** A=1g ~45 seeds, B=5g, C=20g; 1lb @$25.00. 1,270 seeds/oz.

5412 Primrose This polyheaded wind-resistant sunflower is perfect for cutflowers. It bears 4-5" lemon-yellow petals with attractive brown centers which hold their blooms for a long time. About 5-7'. A=1g, ~20 seeds, B=5g, C=20g; 1lb @$40.00. 560 seeds/oz.

Prices for annual flowers #5004-5497:
A=65¢, B=$1.80, C=$5.00.

5416 Schnittgold Contrast is the watchword for this handsome single-headed 5' sunflower. Its double ring surrounded by deep yellow petals makes a striking display. The center pollen ring is black and flat, surrounded by an auxiliary ring of brown. "Schnitt" means "cutting" in German; the variety makes a superb cutflower. 8-10" blooms. A=1g, ~25 seeds, B=3g, C=12g. 700 seeds/oz.

5420 Selma Suns Mix Trialer Donna Dyrek rates these her favorite sunflowers for their fragrance, beautiful diversity, and plethora of polyheading 6" blooms. Selma's heads have small dark centers, pointed petals, and display various hues and shades including yellows, golds, maroons and reds. Dyrek reports that Selma "flowers forever if the squirrels don't rip off the heads." Stalks grow 6-7'. A=1g, ~55 seeds, B=3g, C=12g; 1lb @$35.00. About 1,560 seeds/oz.

5424 Sunbeam F-1 hybrid. Van Gogh might have been imagining this variety when he produced his magnificent work. Sunbeam's spectacular 4" green center is truly spellbinding, especially alongside its thin second ring of burgundy framed by its big rich golden-yellow petals which merge to yellow-green disks that slowly change color to yellow then brown as the plants mature. No other sunflower in our trials had a comparable pollen-free green center. Single headed on 5-5½' stalks. From Sakata in Japan. A=.5g, ~10 seeds, B=1.5g, C=4.5g. 560 seeds/oz.

5428 Sungold Dwarf A Danish variety which was the best of the Teddy Bear-types in our trial and much nicer than the original Teddy Bear. Polyheaded blooms growing on very short stems (the main stalk is only 2') are fully double giving the fuzzy effect admired by many. Habit almost like a well-behaved dahlia. Drew much attention and many comments at our sunflower display at Common Ground Fair in 1994. Blooms hold well compared to other dwarf types. Has pollen. A=1g, ~50 seeds, B=3g, C=12g; 1lb @$55.00. 1400 seeds/oz.

5432 Sunspot With Sunspot you can bring the cheer of sunflowers indoors during those long cold winter months. This dwarf 2½' plant can be grown in a container in your house! Although its stem is relatively diminutive, there is nothing puny about its 8" flowers which look like traditional sunnies—yellow with a dark center. For good growth choose a warm sunny location, indoors or out. You may need to provide some support as Sunspot approaches maturity. A=.25g, ~5 seeds, B=1g, C=3g; 1lb @$35.00. 560 seeds/oz.

5436 Vanilla Ice *H. debilis* Imagine a screening hedge of white sunflowers! These 5' stalks set blossoms with creamy white petals surrounding a rich dark brown disk. Polyheaded and similar to the better-known Italian White, but a superior performer in our trial. A=.2g, ~45 seeds, B=.6g, C=2.4g. 6,250 seeds/oz.

5439 Sunflower Sampler For those who wish to get in on the sunflower rage without spending a pile of jing, we'll mix seed for a half dozen or so varieties into one package. Create a lovely display for 65¢. No dwarfs or mammoths. NEW! A=.5g, B=1.5g, C=4.5g.

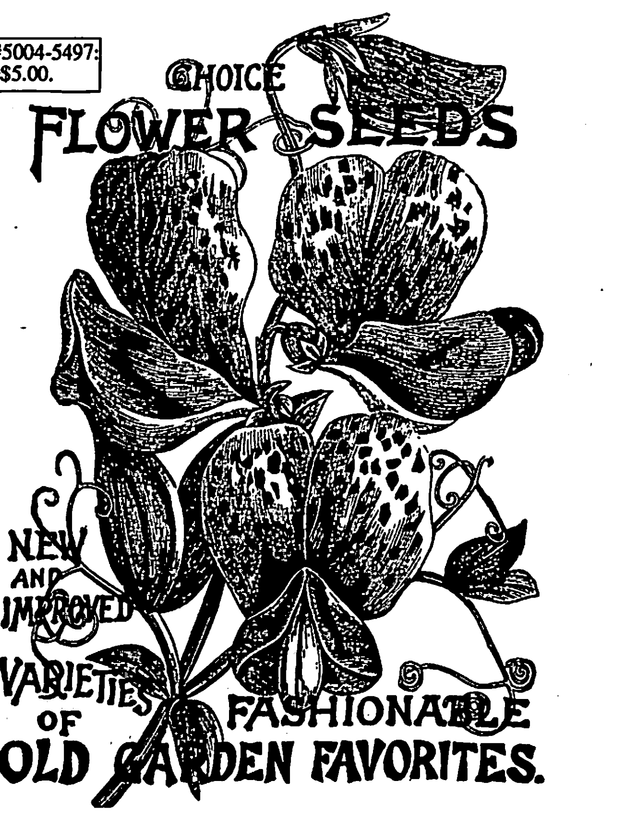
SWEET PEA *Lathyrus odoratus*

Selection
OF
ALL
THE BEST
NEW SWEET PEAS

Native to Sicily, first domesticated around 1699 when amateur botanist and monk Father Francis Cupani discovered the variety which bears his name and shipped seed to a hothouse grower in England. Painted Lady, a rose and white tinted pink, was the first named variety in 1737. In the late 1800s extensive breeding work, especially by Henry Eckford who accounted for 115 of the 264 varieties exhibited at the Crystal Palace in 1900, expanded the range of available colors. Around 1900 Silas Cole, gardener to the Earl and Countess Spencer, found a sport with much larger ruffled flowers but less scent than Eckford's varieties. It created a sensation when it was exhibited in 1901. From this variation derive all modern strains including Spencer, Cuthbertson, Knee-Hi and Mammoth. In response to a revived interest in fragrance, Bodger Seeds Ltd. obtained as many of the pre-Spencer varieties as possible and created a mix called Old Spice in the 1970s. Now, when gardeners are again demanding fragrance in individual colors, Bodger has begun to offer the old strains individually.

Soak seeds for 12-24 hours prior to sowing. For earliest blooms, sow indoors 2 mos. before setting out, or sow direct in spring. Likes full sun and moist rich soil. About 350 seeds/oz. Perennial sweet pea is #6296.

5441 Cupani "You've got to find a source for these," I pleaded to Nikos at my 1996 sweet pea trial. It took her a year, but she did. Named for the Sicilian monk who found these bicolors growing wild, Cupani combines deep maroon-purple upper petals with deep blue lower petals. No other variety can match its intoxicating fragrance. Celebrating its 300th birthday in a surge of revived interest. 5' vines. 340 seeds/oz. A=2g, ~25 seeds, B=8g, C=24g; 4oz, $12.00. NEW!



5442 Little Sweetheart Mix Sweetheart is the most dwarf of all sweet peas, with bushes growing only 8-12". Produces its best blooms in cool fall weather. Bright color range of red, pink, white, rose, lilac and blue. A=4g, ~48 seeds, B=12g, C=48g; 4oz, $8.00. 340 seeds/oz.

5448 Knee High Mix Semi-dwarf 20" bush-type plants need no support, produce full-length stems. A=7g, ~78 seeds, B=28g, C=84g; 1lb @$16.00.

5454 Mammoth Mix 4-6' staking variety. The best tall mix in our many gorgeous trials. Never stops blooming from July to September; even though temporarily slowed by heat waves, will revive over and over again to full glory. Long stems make for ideal cutflowers. Mixture of crimson, scarlet, white, lavender, deep rose, medium blue and pink. A=7g, ~85 seeds, B=21g, C=63g; 1lb @$18.00.

5457 Perfume Delight We've been looking for sweet peas with more fragrance, and Perfume Delight delivers. Vines to 3' require staking. Slow bloomers with medium-long stems in a mixture of colors. Fill your gardens and rooms with perfume! A=4g, ~48 seeds, B=12g, C=48g; 1lb @$22.50.

5460 Exotic Venidium *V. fastuosum* Striking deep black centers ringed with bright orange petals edged in black can be spellbinding, especially if you don't let its multibranching habit and deep-cut leaves distract you. The daisy-like flowers will draw your eyes to their study in contrasts. Sprawling 2½' plants like a sunny location. Also known as Namaqualand Daisy. (Namaqualand is in southwest Africa.) Start indoors, transplant out after danger of frost. Space 2' apart. A=.1g, ~90 seeds, B=.3g, C=1.2g. ~26,000seeds/oz..

5462 Purple Top Verbena *V. bonariensis* One look was all I needed to fall in love with this free-flowering verbena. Don't confuse it with the hybrid dwarf bedding plant (which is available at #5672-76). Proud strong 3-4' stems covered with vibrant purple flowers which thrive in heat and will bloom from July to September. Makes an ideal novelty cutflower. A=.1g, ~400 seeds, B=.4g, C=1.2g. 113,000 seeds/oz.

Prices for annual flowers #5004-5497:
A=65¢, B=$1.80, C=$5.00.

ZINNIA *Z. elegans*

These showy annuals were named for 18th century German botany professor Johann Gottfried Zinn. One of the easiest to grow from seed, and a favorite for bright color in Maine summers. Zinnia flower essence is used to bring out playfulness and lightheartedness. Cut when flowers are fully mature. Deadhead to continue production. Sow in a sunny spot after last frost, or start indoors for earlier blooms. See also #5690.

5470 Cactus Mix Large ruffled blossoms resemble chrysanthemums. Profuse immense blooms in scarlet, orange, pink, yellow. Full sun. 3'. A=1g, ~105 seeds, B=7g, C=28g; 4oz, $10.00. 3,000 seeds/oz.

5474 Gold Medal Mix A formula blend of cherry, orange, pink, purple, scarlet, white and yellow dahlia-flowered blossoms 4-5" in diameter excellent for cutting. Flowers are flat-petaled, semi-double on 3½' stems. Bred by Bodger. A=1g, ~105 seeds, B=7g, C=28g; 4oz, $10.00. 3,000 seeds/oz.

5478 Persian Carpet *Z. haageana* These eye-catching variegated fully double and semi-double 2" flowers borne on 1' stalks hold a long time. They have maroon centers, with white, yellow or gold on the outside. The Mexican Zinnia is smaller and less gaudy than our other zinnias and very pleasing in bouquets. 1952 AAS. A=.5g, ~400 seeds, B=3g, C=15g. 22,000 seeds/oz.

5482 Pumila Mix (Cut & Come Again) Small 2' plants with flowers 2½-3" across. Wide range of colors includes orange, yellow, white, pink, lavender and scarlet. A=1g, ~140 seeds, B=7g, C=28g; 4oz, $10.00. 4,000 seeds/oz.

5486 Scarlet Flame Even Gene, who doesn't like gaudy zinnias, was attracted to Scarlet Flame's elegant bright scarlet blooms. 3' stems. A=1g, ~110 seeds, B=7g, C=28g; 4oz, $10.00. 3,100 seeds/oz.

5490 State Fair Mix We've developed a liking for this old-fashioned variety with its rich array of huge single and double blooms borne on 30" plants. The blooms are much showier than those in the Gold Medal Mix. Staffer Susan Kiralis loves "the intensity of their fully saturated reds and magentas." A=.5g, ~50 seeds, B=2g, C=12g; 4oz, $16.00. 3,000 seeds/oz.

5493 Swirls Zinnia These zinnias wowed everyone who saw them in our 1992 trials with their slightly fluorescent bicolor blooms of rose and white or red and yellow. The 4" flowers are fully double to semi-double with slightly ruffled flat petals borne on 2' stems. A=1g, ~190 seeds, B=7g, C=28g; 4oz, $10.00. 5,400 seeds/oz.

5497 Cutflower Mix A mixture of annual flowers which can be used for cutting. Includes popular types such as aster, bachelor's button, calendula; also some lesser-known kinds. A=1g, B=14g, C=56g.

Flowers for Fragrance, Food, Frivolity & Finery

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Bachelor's Button	5052-60
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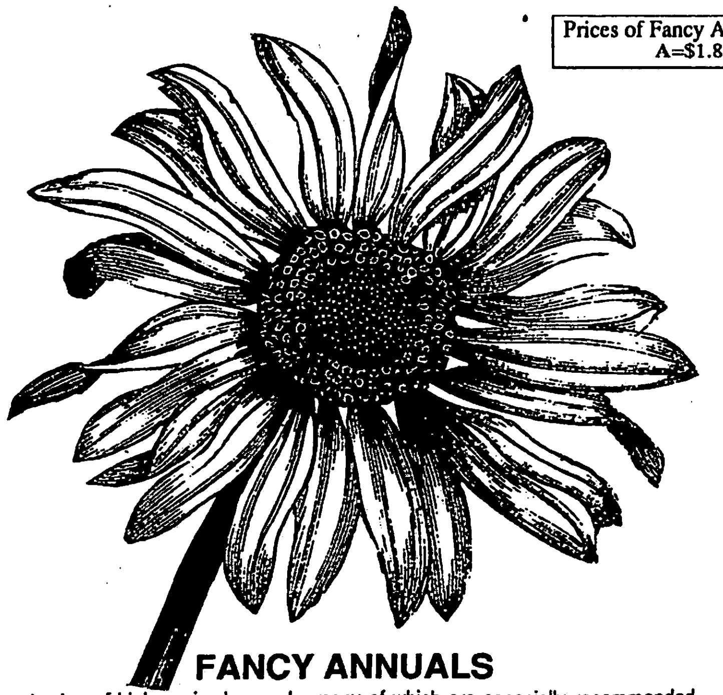
Clarkia	5120
Cockscomb	5526-30,5732
Columbine	6042-48
Coneflower	4776,6054
Coral Bells	6062-64
Coreopsis	6068
Dahlia	5558
Dusty Miller	4382
Blue Flax	6120
Scarlet Flax	5150
Four O'Clock	5164
Gaillardia	6130
Gazania	5572
Globe Amaranth	5742-54
Godetia	5170
Heliotrope	5576
Impatiens	5582
Lamb's Ear	5776
Larkspur	5174-98
Lavatera	5202-10
Linaria	5212
Lobelia	5214
Love-Lies-Bleeding	5218
Lupine	6186
Marigold	5228-52,5601-16
Monkey Flower	6880
Mountain Bluet	6214
Musk Mallow	6224
Nasturtium	5280-96,5625
Pansy	5306,5632
Petunia	5638-44
Phlox	5312
California Poppy	5352
Portulaca	5652-56
Primrose	6262
Salvia	5662,5804
Schizanthus	5365
Shasta Daisy	6272
Snapdragon	5368, 5666
Spilanthes	4972
Stock	5374
Strawflower	5860-76
Sweet William	6306
Venidium	5460
Verbena	5672-76
Vinca	5682
Zinnia	5470-93,5690

Prices of Fancy Annuals (#5506-5690):
A=$1.80, B=$6.00.



FANCY ANNUALS

A selection of higher-priced annuals, many of which are especially recommended for commercial growers.

Seeds per packet for flowers are approximate. They are intended as guides, not guarantees, because we pack by weight, not by count. Available in two sizes except where noted. **Packet weights are listed with each flower.**

Flowers are arranged here by common name. A chart of common uses is on page 49. An index of botanical names is on p. 56.

AGERATUM *A. houstonianum*

Showy annual also known as Flossflower. Great for summer borders. Water in hot weather. Will not tolerate frost. Start indoors 6-8 weeks before last frost. Cut for vase when flowers are first opening.

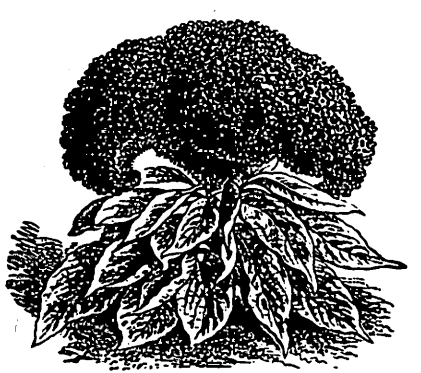
5506 Blue Blazer F-1 hybrid. Puffy deep blue flowers on 8" plant. Very popular for borders and bedding. Starts blooming early, can withstand heat and continue into fall. A=.05g, ~350 seeds, B=.2g. 200,000 seeds/oz.

5510 Blue Horizon F-1 hybrid. A long-stemmed cutting variety for everyone who loves ageratum and wants to bring them inside. Works well as an everlasting when dried. Grows 30" with blue flowers. A=.04g, ~150 seeds, B=.2g. 170,000 seeds/oz.

5514 Matsumoto Aster *Callistephus chinensis* A very classy cutflower which may be harvested by the individual stem or in its entirety. Flowers sport distinct yellow centers amidst a variety of shades (apricot, blue, pink, red, rose, salmon and white) about 100 days after sowing. 2" semi-double blooms are concentrated at the top of strong 2¹/2' stems. For other asters see **#5024-5044**. A=.2g, ~90 seeds, B=1g. 13,000 seeds/oz.

5522 Chick-a-Biddy *Asarina scandens* This old-fashioned climber is making a comeback. Fresh green small-leaved foliage and masses of 1¹/4" lavender or dark purple trumpet-shaped flowers can rapidly fill a 4' trellis. Sow early for quick blooms which will continue in flushes until frost. Its self-twining habit makes it ideal for topiary but it also does well in hanging baskets or climbing from the ground. Surface sow or barely cover after danger of frost is past. Seed organically grown in Maine. A=.01 gram ~40 seeds, B=.04g. 4,000 seeds/g. NEW!

COCKSCOMB *Celosia cristata*



Sow indoors in peat pots 4 weeks before last frost. Too-early seeding and cold temperatures can cause premature flowering. Seedlings sensitive to both drying out and damping off; apply even moisture. Pinch early heads to induce branching. See also **#5726-5732.**

5526 Apricot Brandy *C. c. plumosa* AAS. Compact 12" plants ablaze with very uniform apricot-orange plumes. Needs light to germinate. A=.1g, ~115 seeds, B=2g. 32,000 seeds/oz.

5530 Coral Gardens This is an extra-dwarf brain type growing fairly large flowers on compact 10" plants. Blooms display a rich mix of red, crimson, rose, orange and golden with an almost neon glow. Be prepared when people approach your 6-pack annuals and ask "Do you have any brains?" A=.1g, ~120 seeds, B=2g. 34,000 seeds/oz.

5552 Versailles Pink Eye Cosmos *C. bipinnatus* Caught our attention because it was a foot shorter and a week earlier to bloom than Early Sensation. Petals light pink at the tips darkening as they approach the yellow centers. Prolific blooms good for cutting. For other cosmos, see **#5136-40.** A=1g, ~135 seeds, B=4g; 1oz @$20.00. 3,900 seeds/oz.

5558 Figaro Dahlia *D.* x *hybrida* Named for Swedish botanist Andreas Dahl. Early and compact, with a wide range of flower forms, including single, semi-double and double blooms. Colors include red, rose, mauve, violet, orange, salmon, yellow and white. Dahlia is sensitive to day length. If sown in March or April needs to be shaded for 10 hours/day during the first four weeks after emergence. Transplant after frost. 10". A=.4g, ~40 seeds, B=2g. 2,800 seeds/oz.

FLOWERING KALE *Brassica oleracea*

Sometimes used for garnishes or in salad mixes. 10,000 seeds/oz. See also **#5160.**

5566 Red Chidori F-1 hybrid. Flowering kale is called *Ha-Botan* in Japan, meaning "leafy peony." The Japanese are world leaders in hybridizing this species, and in Red Chidori, they have brought their work to its ultimate expression. Of all our trial varieties, Red Chidori had the brightest purple outer leaves and the sharpest red centers. These colors reach their apex shortly after frost when other hues are fast fading away in the garden. Red Chidori leaves have finely ruffled edges which further accent their beauty. A=.2g, ~70 seeds, B=1g.

5570 Red Peacock F-1 hybrid. Crop failure. *Not available in 1998.*

5572 Chansonette Gazania *G. splendens* Named for Theodore of Gaza, a medieval translator of botanical works. Back with an improved color range, these early blooming compact plants exhibit an array of clear bright colors including pink, orange, bronze, white and yellow. Easy to grow and excellent as low border plants. Because flowers tend to close up in shade or cloudy weather, Gazanias will be most pleasing planted in full sun. A=.2g, ~100 seeds, B=1g. 1 oz=14,000 seeds.

5576 Marine Heliotrope *Heliotropium arborescens* Native to Peru, an old-fashioned scented flower with a rich history. It was "to be sown in the Spring, a delicious flower...the smell rewards the care," wrote Thomas Jefferson. The aroma fills the garden on a cool, damp day. Victorian-era rose beds were often edged with heliotrope and it is still cultivated in Europe as a fragrance for perfumes. The fragrance is akin to that of sweet violet, but deeper, and has been described as similar to vanilla, almond or cherry pie. Works well in hanging baskets or containers as well as in the front of borders—any location where the scent will readily reach you. It may be transplanted indoors for the winter. 14-18" plants with deeply etched viburnum-like dark green leaves bear big flat clusters of tiny star-shaped royal blue flowers. Somewhat slow, erratic germinator. Pkt.=.1g, ~150 seeds, B=.6g. 42,500 seeds/oz.

5582 Pink Swirl Mix Impatiens *I. wallerana* Formerly known as Super Elfin Pastel Mix. 8-10" freely branching plants covered with masses of pastel colors: blue pearl, pink with a rose eye, salmon with a coral eye, white, coral, pink and salmon. Impatiens are the #1 bedding plant in this country because they do so well in shade and require so little care. Start indoors. Provide even moisture; do not overfeed. Need light to germinate. A=.03g, ~55 seeds, B=.15g. 50,000 seeds/oz.

Prices of Fancy Annuals (#5506-5690):
A=$1.80, B=$6.00.

MARIGOLD *Tagetes* spp. See also #5228-5252.

5601 Ornament Gem *T. tenuifolia pumila* A third gem in our series of edible signets, studded with multiple tiny fragrant maroon blooms. A=.2g, B=1g. NEW!

5606 Queen Sophia French Dwarf Double *T. patula.* Award-winning anemone-flowered dwarf. Each plant produces many bicolored blooms. Flowers are deep orange rust and, as they mature, petals are edged with gold. Named for Queen Sophia of Spain. 10-12". A=.7g, ~230 seeds, B=3.5g.

5610 First Lady African Semi-Dwarf Double *T. erecta* Voted the favorite AAS flower. A lovely 20" border or hedge plant, covered with sunny yellow double carnation-like flowers 3¹/2" across which keep coming till frost. A=.1g, ~35 seeds, B=1g.

5613 Primrose Lady African Semi-Dwarf Double *T. e.* Trialer Jeanne Griffin has been touting these soft creamy yellow blooms for years. Like the other "Ladies," Primrose blooms profusely on sturdy bushy plants. A=.1g, ~30 seeds, B=.5g., 9,000 seeds/oz.

5616 Inca Orange African Semi-Dwarf Double *T. e.* A wonderful home garden marigold completely blanketed with big 4-5" flowers on full 14" plants. The blooms are fully double, start early, and keep going all summer unless they get waterlogged in a storm and break off. A=.1g, ~32 seeds, B=.6g.

5622 Moon Lily *Datura inoxia* Also known as Angel's Trumpet or Tolguacha. *This plant is poisonous and no part of it should ever be ingested.* Its effects are described by Carlos Castenada in The Teachings of Don Juan. Of spectacular beauty, growing 3' tall and spreading with huge 6" white trumpets of indescribable ambrosial fragrance which open at night. This close relative of Jimson Weed will be a real conversation piece in your garden. Poor germinator. A=.25g, ~20 seeds, B=2g. 2,300 seeds/oz.

5625 Peach Melba Nasturtium *Tropaeolum minus* Recommended by Eva Sommaripa and other growers who treasure its unique delicacy. Its primrose-cream blossoms with pearly red centers remind one of a cut peach. It sets its abundant blooms above the compact lily-pad foliage. Seed is expensive but worth it. For other nasturtiums see **#5280-5296.** A=1g, ~8 seeds, B=4g. ~225 seeds/oz.

5628 Only the Lonely Nicotiana *N. sylvestris* Named in honor of John Nicot, who introduced tobacco to France. Also known as Woodland Tobacco. For years we looked for a nicotiana whose fragrance was deep enough to allow us to overlook the plant's gangliness. The dwarf varieties always let us down. But this stately 5' variety looks almost handsome, and its powerful fragrance perfumes the garden both day and night. You might want to plant it near a door or under your bedroom window where you can enjoy the smell during the night. Clusters of drooping tubular white blossoms. A=.02g, ~640 seeds, B=.4g. 911,104 seeds/oz.

5632 Jolly Joker Pansy *Viola* x *wittrockiana* All-America winner. Although it lacks the usual "face," its vibrant color combination of orange and purple make Joker an eye-catching addition to your garden. One of the hardiest pansies, as well as one of the slowest to "stretch." 8". A=.1g, ~70 seeds, B=.5g. 20,000 seeds/oz.

PETUNIA *P.* x *hybrida*

Start indoors in warm place 8 wks before setting out after danger of frost. Do not cover seeds; light aids germination. Use loose media and avoid overwatering. 280,000 seeds/oz.

5638 Daddy Mix This very showy hybrid grandiflora has big 4" ruffled blooms in shades of light blue, orchid, peppermint, pink, plum and strawberry with darker veins. Stunning in baskets, these uniform plants also exhibit good weather tolerance when planted in the sunny section of your garden. 12-15". A=.03g, ~300 seeds, B=.12g.

5642 Pink Wave F-1 hybrid. The Wave has caught on with our customers. We offer the pink, with white throats, to complement the purple. Pelleted seed. Packets by seed count. A=~10 seeds, B=~50 seeds.

5644 Purple Wave F-1 hybrid. If you've given up on petunias because they're "wimpy" or require too much fussing, try these. Each plant carpets the ground with a spread of 4x4' of vivid fuchsia. Wave showed extreme drought tolerance in our 1995 trial, sailed through light frost and bounced back after torrential rain. Although never deadheaded or cut back, the 3" flowers just kept coming and coming and coming. If you're looking for one to grow in containers or you need to cover a lot of ground or you just want a beautiful sea of color, try Wave. 1995 AAS. Pelleted seed. Packets by seed count. A=~10 seeds, B=~50 seeds.

PORTULACA *P. grandiflora*

The familiar Moss Rose is good in hanging planters and most colorful in massed plantings. Easy to grow, can stand heat. Start in a warm spot. Needs light to germinate. Thrives in sandy soil, like full sun, blooms 8 weeks from sowing. Blossoms close in cloudy weather and late afternoons. 295,000 seeds/oz.

5652 Sundial Mix A dramatic improvement in this South American native, exhibiting early blooming of large 2" fully double flowers which stay open longer than other mixes. During the 1995 drought, Sundial excelled, providing a vivid array of cream, fuchsia, gold, peppermint, orange, pink, scarlet, white and yellow colors on succulent low-spreading 6" plants. Honored as Australia's 1991 Flower of the Year. A=.01g, ~105 seeds, B=.05g.

5656 Sundial Peppermint An arresting color combination of light pink brushed with streaks of deep rose giving the overall effect of an old-fashioned peppermint stick. Our favorite strain in the Sundial mix above. A=.01g, ~105 seeds, B=.05g.

5662 Cleopatra Scarlet Salvia *Salvia splendens* Very bright scarlet blooms on dense 6" flower spikes attract hummingbirds and hold longer before fading than Carabiniere. Compact well-branched 1' plants exhibit very uniform habit and timing. Traditionally used as a bedding plant. Cut the initial flower spikes after they fade to induce further flower development. These bushy floriferous bedding plants are day-length sensitive so must be started early. Replaces Carabiniere. NEW! A=.2g, B=1g.

5666 Sonnet Mix Snapdragon *Antirrhinum majus* F-1 hybrid semi-dwarf. The best snapdragon in our trials, with blooms refined, early and in a full range of very bright colors. Annual grows 20". See **#5368** for culture. A=.025g, ~50 seeds, B=.1g. 180,000 seeds/oz.

SUNFLOWERS *Helianthus annuus* See also #5400-5439

5668 Prado Red Fleuroselect novelty winner. The best red sunflower in Donna Dyrek's trials, specially bred in Holland for the cutflower trade, featuring long, long stems. Its brown center disks are surrounded by small rich velvety red petals which extend the range of sunflower colors. Each 4' multi-branching plant bears 15-18 long-lasting flowers that shed pollen sparingly. Would make a striking contrast planted alongside Vanilla Ice. NEW! A=.5g, ~13 seeds, B=2g; 1oz @$25.00. 710 seeds/oz.

5669 Prado Gold Fleuroselect quality winner in 1993. Golden yellow twin to Prado Red except Gold's brown center has a green indentation at the bullseye. Like Prado Red, multibranching and early to bloom. Enjoy these in rich-hued bouquets. NEW! A=.5g, ~13 seeds, B=2g; 1oz @$25.00. 710 seeds/oz.

VERBENA *V.* x *hybrida*

Clusters of starry blooms cover this 6-10" hybrid annual bedding plant. Free-flowering, long-lasting blooms make a stunning vibrant border. Prechill seeds 5-7 days in refrigerator before sowing. 10,000 seeds/oz.

5672 Novalis Deep Blue with Eye Striking purple blooms with white starlike centers. 1989 AAS. A=.2g, ~70 seeds, B=1g.

5676 Novalis Scarlet with Eye We liked the blue so much that we decided to trial Novalis Mix. The blue and scarlet work so well together in the mix that we opted to carry each individual color. Interplanting the two will give you a striking border. A=.2g, ~70 seeds, B=1g.

5682 Peppermint Cooler Vinca *Catharanthus rosea* Wanted: A low maintenance 8" bedding plant that stands up to the worst heat and drought and is rarely bothered by insects or diseases while blooming profusely from July until frost! Common alias: Madagascar Periwinkle. Frequent whereabouts: Blending into gardens or brought indoors as everblooming houseplants. Relatives: The common vinca or creeping myrtle. Resembles: Impatiens. Last seen: In Fedco Seeds fancy annuals section # **5682**. Reward: 2¹/4" white blooms with a red "eye" and overlapping petals with a rounded formal appearance. Remains neat and covered with blooms until frost. Preferred captured alive, but will be dead unless more of you find it! A=.2g, ~150 seeds, B=1g. 21,000 seeds/oz.

5690 Ruffles Mix Zinnia *Z. elegans* F-1 hybrid. Bred for bouquets. Flat-petaled, double to semi-double flowers on long stems. Free blooming, respond to frequent cutting. Yellow, scarlet, pink and cherry blooms. Form an elegant hedge 24-30". The most refined zinnia in our selection. For other zinnias see **#5470-93.** A=.15g, ~15 seeds, B=.6g. 3,000 seeds/oz.

EVERLASTINGS

Prices for everlastings #5705-5982:
A=65¢, B=$1.80, C=$5.00.

Seeds per packet for flowers are approximate. They are intended as guides, not guarantees, because we pack by weight, not by count. Available in three sizes except where noted. **Packet weights are listed with each flower.**

Flowers are arranged here by common name. A chart of common uses is on page 49. An index of botanical names is on p. 56. Annuals except where noted.

5705 The Pearl Achillea *A. ptarmica* This hardy perennial bears no resemblance to wild yarrow. Instead it has individual clusters of fully double pure white blooms with a small yellow center, almost like a large double Baby's Breath. Easily cultivated, it spreads nicely and can be used for a "wild" border. Moreover, the flowers are fine for cutting from spring until frost and can be enjoyed either fresh or dried, adding an engaging splash of white to arrangements. Zones 3-10. 2'. A=.05g, ~350 seeds, B=.15g, C=.6g. 200,000 seeds/oz.

5710 Acroclinium *Helipterum roseum* Also known as Sunrays. Daisy-like flower which may be used fresh as cutflower. Pick in bud stage; will open as it dries. White, rose and pink shades. Start in cool place 2 mos. prior to setting outdoors, or sow direct outdoors after frost. Annual. 2'. A=.2g, ~100 seeds, B=.6g, C=2.4g. 12,600 seeds/oz.

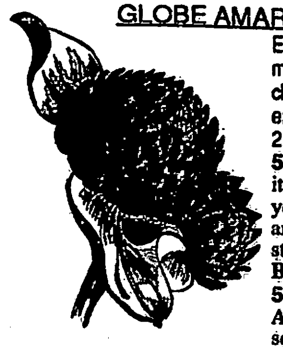
5716 Blazing Stars *Liatris spicata* Perennial also known as Gayfeather. 18" spikes of rosy purple flowers for cutflowers or drying. Start indoors in late winter in cool place and set out in spring in 6-8 weeks or direct seed in spring. Takes 3-4 weeks to germinate. Zones 3-9. A=1g, ~330 seeds, B=5g, C=15g. 9,500 seeds/oz.

5720 Green Gold Bupleurum *B. griffithii* I'd never heard of bupleurem until Nikos brought a dried stem to the office. It is not well known except in Dutch flower auctions where it commands a price similar to roses, but this unique plant with yellowish flowers and round leaves is gaining attention from dried flower growers. Its well-branched 2' stems air-dry perfectly, retaining their green color and looking like they had been dried in glycerine. Moreover, because each stem fans out, an individual stem provides backdrop for an entire arrangement, either fresh or dried. Start indoors early to reach full growth potential. A=.2g, ~70 seeds, B=.6g, C=3g. 10,000 seeds/oz.

5726 Pink Candle Wheat Celosia *C. cristata spicata* An improved wheat celosia that is more adaptable to growing in northern climes than other kinds. Like melons, it requires a little extra attention for success. Start indoors early, transplant before flowering without permitting shock, and use row covers outdoors. Its shining rose-pink plumes on long strong stems are well worth the extra fuss. They hold up well as cutflowers and dry beautifully. The 3' clumps are lovely as a vertical pink accent for late season displays. Colors, which lighten during summer's heat, intensify in the cooler temperatures of fall. See also **#5526-30**. A=.1g, ~85 seeds, B=.4g, C=1.2g. 24,500 seeds/oz.

5732 Forest Fire Cockscomb *C. c. plumosa* Plume-type celosia or Feather Amaranth shows bright scarlet flowers, with strikingly beautiful bronze-red foliage. 30-36". A=.2g, ~300 seeds, B=7g, C=28g. 43,500 seeds/oz.

5736 Chinese Lantern *Physalis alkekengi* Physalis is the Greek word for bladder, referring to the husks. Perennial grown for its deep orange "lanterns," the calyx which surrounds the red fruit. May be sown indoors in warm place. Germination takes 3-4 weeks; do not cover seeds. Likes full sun. Dig out every three years to prevent invasion. Zones 3-10. A=1g, ~600 seeds, B=4g, C=12g. 17,500 seeds/oz.



GLOBE AMARANTH *Gomphrena globosa*

Easily grown in any soil, likes hot sun. One of the most prolific. Tolerates some frost. Beautiful clover-like 1" flowers on 2' stems. Can also be enjoyed as bedding plant. Sow indoors in warm spot, 2 months before setting out. Do not overwater.

5742 Orange Stood out in our 1994 trials for its large reddish-orange blossoms with a hint of yellow undertone, well suited for fall holiday arrangements. Growers will prize its long strong stems and vivid colors. 18". A=.1g, ~25 seeds, B=.4g, C=1.2g. 7,300 seeds/oz.

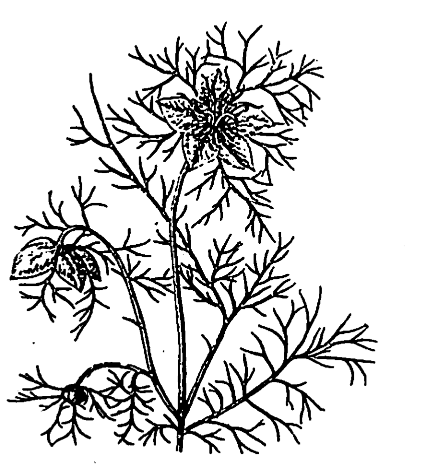
5746 Purple Bright purple, almost fuchsia. A=.1g, ~25 seeds, B=.4g, C=1.2g. 12,000 seeds/oz.

5750 Qis Red Beautiful strawberry-red profuse blooms which will add vibrant color to your arrangements. A=.1g, ~25 seeds, B=.4g, C=1.2g. 12,000 seeds/oz.

5754 Mix Shades of purple, rose, lavender & white. A=.2g, ~50 seeds, B=.8g, C=3.2g. 12,0300 seeds/oz.

5762 Honesty *Lunaria annua* Also known as Silver Dollar, Moneyplant, and Moonwort. Winter-hardy biennial has fragrant lavender flowers, but is usually grown for its large coin-shaped silver seed pods which are lovely in winter bouquets. Sow indoors in cool spot before setting out to a sunny location or direct sow spring or fall. 3' A=1g, ~50 seeds, B=14g, C=42g. 1,500 seeds/oz.

5770 Immortelle Mix *Xeranthemum annuum* Papery daisy-like flowers 1½" across in a wide range of colors; also a nice cutflower, grows to 3'. Grown easily from seed, or can be started early indoors. Germinate at 70-75° in 2-3 weeks. A=.25g, ~190 seeds, B=1.5g, C=6g. 22,500 seeds/oz.



LOVE-IN-A-MIST *Nigella* spp.

5782 Persian Jewels Mix *N. damascena* Profuse blooms in pink, blue and white shades surrounded by a cloud of greenery make lovely bouquets. Seed heads are used dried and are especially nice with a little bit of the flower attached. Direct seed as soon as ground can be worked, or sow indoors in a cool spot 2 months prior to setting out. Plant in full sun. 18" A=.4g, ~160 seeds, B=2g, C=14g. 11,000 seeds/oz.

5786 Transformer *N. orientalis* No, this is not an electrical plant. It generates no power, only yellow flowers followed by curiously shaped seed pods that may be "transformed" into seven-pointed stars by splitting the pods open at the seam and folding them back in a form of floral origami! Unique and easy to grow. 2' tall. A=.5g, ~200 seeds, B=2g, C=8g. 11,400 seeds/oz.

5790 Exotic *N. hispanica* Nikos has a single velvetleaf plant growing in her field from which she harvests starry seed pods every year for Christmas ornaments. The velvetleaf is a farmer's bane, a pernicious weed, but oh, those pods! Exotic's golden brown pods are similar to velvetleaf's with a more spidery appearance that will add interest and volume to any dried arrangment. Unlike velvetleaf, this annual won't be a nuisance in the field. Doubles as a serviceable cutflower blooming with an arresting shade of deep blue—almost purple—with open form and striking maroon stamens. Atop 16" stems, the blossoms hold longer in a bouquet than other Love-in-a-Mists. Likes full sun or light shade. A=.1g, ~90 seeds, B=.4g, C=2g. 25,500 seeds/oz.

5804 Tricolor Salvia *S. viridis* Also known as painted sage. This prolific little beauty is splendid both as a dried flower or as a filler in fresh arrangements. Although its leaves are entirely green, it gains its name from its white and blue flowers set off by large pink-to-purple bracts. Easily air-dried, it will remain very colorful, flowering until frost if old blooms are removed. 18" stems. Germinates in 21 days at 60°F. Needs well-drained soil. A=.5g, ~340 seeds, B=2g, C=6g. 19,000 seeds/oz.

5810 Ping Pong Starflower *Scabiosa stellata* Small white flowers dry to ball-shaped many-faceted seed heads. Each facet has a delicate maroon star embossed on its center. 2' annual. A=.4g, ~10 seeds, B=2g, C=6g. 800 seeds/oz.

STATICE *Limonium sinuatum*

Faithful standby in everlasting bouquets; also good in fresh arrangements. Annual reaches 2-2½' on sturdy stems. Flowers may be gathered for drying many times throughout summer. Sow in warm spot indoors 2 mos. prior to setting out. Grow in full sun. Seed is rubbed for easier germination. 8,400 seeds/oz.

5816 Apricot A=.2g, ~60 seeds, B=1g, C=4g.

5820 Atrocaerula Blue Medium deep violet blue. A=.2g, ~60 seeds, B=1g, C=4g.

5824 Lavender A=.2g, ~60 seeds, B=1g, C=4g.

5828 Rose Beauty Red. A=.2g, ~60 seeds, B=1g, C=4g.

5832 Purple Monarch Deep purple. A=.2g, ~60 seeds, B=1g, C=4g.

5836 White A=.2g, ~60 seeds, B=1g, C=4g.

5842 Mixed Colors A=.4g, ~120 seeds, B=2g, C=6g.

5846 German Statice *Goniolimon tataricum* Large silvery-white flower heads for drying. Grow indoors in a cool place 6 to 8 weeks, set out in early spring, or direct seed early spring or late fall. Perennial. Clean seed. 20". A=.05g, ~50 seeds, B=.2g, C=1g. 31,000 seeds/oz.

5852 Russian Statice *Psyllostachys suworowii* Long gracefully curved branched spikes with bright rosy-pink flowers. Good color retention. A poor germinator. Annual reaches 18". Originally from Turkestan. A=.2g, ~1,280 seeds, B=.8g, C=2.4g. 175,000 seeds/oz.

5860 Gabriele Rose Beauty Strawflower *Helichrysum cassianum* Each stem produces a cluster of small daisy-like rose pink flowers with yellow centers. The doubled petals create a full "starry" effect. The 16" plants are easy to grow, like full sun, and are already nearly dry when fully developed. Their texture and ability to hold color well enable them to fill a significant area in arrangements. A=.1g, ~27 seeds, B=.5g, C=2g. 8,000/oz.

Prices for everlastings #5705-5982:
A=65¢, B=$1.80, C=$5.00.

STRAWFLOWER *H. bracteatum*

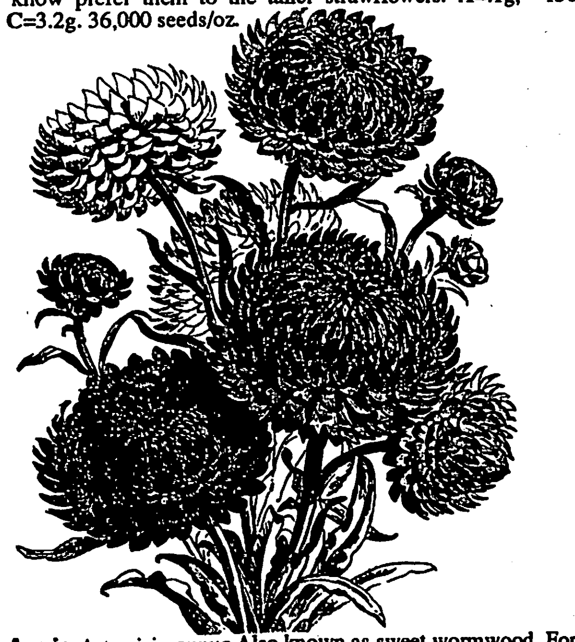
The freeblooming strawflower is good for border color as well as for drying. Monstrosum varieties grow 30-40" tall, have 2-2½" fully double flowers. Sow indoors in a warm spot 2 mos. before setting out. Do not cover seeds. Grow in full sun. Gather blossoms before fully opened. Like warm weather but will produce blooms into fall.

5864 Monstrosum Fire Ball Bright red. A=.2g, ~260 seeds, B=1g, C=5g. 36,000 seeds/oz.

5868 Monstrosum Silvery Rose A very subtle bicolor with pink center petals surrounded by silvery white. Borne on well-branched plants that start producing 3½-4 months after indoor seeding. A=.2g, ~260 seeds, B=1g, C=5g. 36,000 seeds/oz.

5872 Monstrosum Mix Hot pink, light pink, white, gold and deep rose. A=.33g, ~400 seeds, B=7g, C=28g. 45,000 seeds/oz.

5876 Bikini Mix These bikinis bear bright pink, red, white, yellow and gold double flowers on dwarf 14-18" plants in just 12 weeks. Several commercial arrangers we know prefer them to the taller strawflowers. A=.1g, ~130 seeds, B=.8g, C=3.2g. 36,000 seeds/oz.



5884 Sweet Annie *Artemisia annua* Also known as sweet wormwood. For years our booth at Common Ground Fair was adjacent to Delightful Odds and Herbs. They always had Sweet Annie for sale. We've come to associate its pungent fragrance with the fair. Increasing numbers of fairgoers have asked for its seed. Annie grows up to 5', with light green leaves valued for everlasting wreaths. It will reseed itself vigorously. Seed must be frozen for 2 days, then germinated in light. A=.2g, ~50 seeds, B=.6g, C=2.4g. 7,000 seeds/oz.

5890 Grandiflora White Winged Everlasting *Ammobium alatum* To some people its branches look winged...to me they just look sinuous. No argument, though, that its white petals with yellow centers look mighty good in arrangements. Sow indoors 8 to 10 weeks before setting outdoors in sunny location. 24". A=.5g, ~1,200 seeds, B=2g, C=6g. 67,500 seeds/oz.

GRAINS & GRASSES

Grasses are a special tool in the flower arranger's kit. Choose these decorative annuals for their differing forms as well as for their colors. The intricate designs of their heads make great accents.

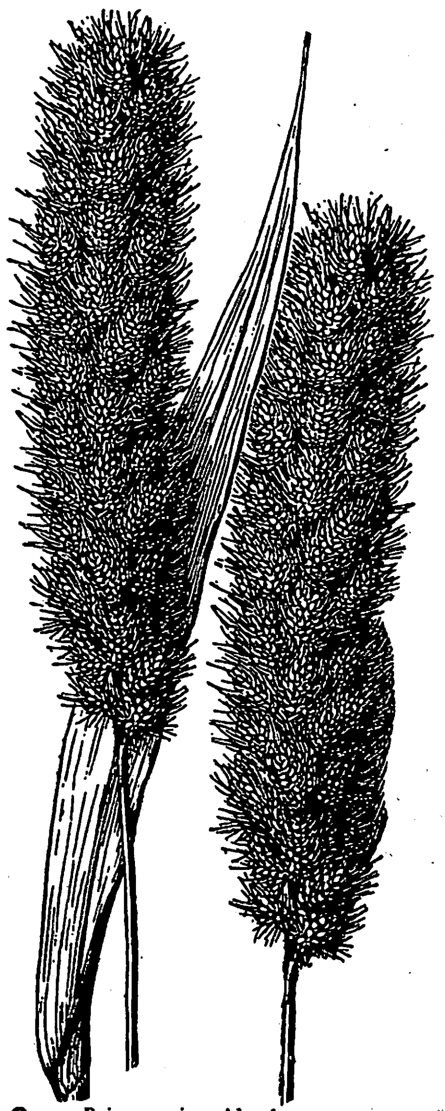
5910 Sheba Barley *Hordeum vulgare* We are looking for a seed grower. *Not available in 1998.*

5930 Red Broom Corn *Sorghum vulgare* (105 days) Not a true corn, broom corn looks and grows like corn but develops no ears, producing instead, a tall spray of seed heads at the top of the plant in lieu of a tassel. These 2-3' sprays are laden with shiny red ⅛" seeds which birds love. Incorporate seeds into edible bird feeder wreaths or leave them intact to add a bit of variety to traditional fall decorations, or comb them out of the dry stalks and tie the seedless heads together to make straw brooms. Broom corn is the true source of our natural straw broom. Stalks will grow up to 10' in an optimal season, more likely they will be one to three feet shorter in our climate. A=4g, ~190 seeds, B=12g, C=36g. 1,600 seeds/oz.

5940 Calico Popcorn *Zea mays* (105 days) An heirloom dual-purpose corn with 5-8" ears that look like smaller versions of Indian corn. The shiny bright ears come in an array of colors, with red, yellow and calico most common, but brown, purple, blue, white and other combinations possible. Kernels are smaller than those of most Indian corns, but larger than conventional popcorns. Calico is both decorative and edible so you can hang it on your door in fall and pop the very same batch on Thanksgiving. Seed grown by the Biseks in Minnesota. A=28g, ~270 seeds. 4,000 seeds/lb. *Not available in larger sizes.*

5950 Hare's Tail *Lagurus ovatus* Grown for its soft grey-to-white dense wooly conical heads which feel like rabbit's fur and will tickle your fancy. Easy to air-dry; make a great addition to everlasting arrangements. 1' stems. A=.1g, ~180 seeds, B=.5g, C=3g. 51,000 seeds/oz.

5958 Foxtail Millet *Setaria macrocheata* Its graceful 3-6" golden seed heads bobbing on an August breeze attract attention even before harvest. After harvest, Foxtail Millet makes a striking counterpoint in floral displays. Customers have been asking for this specific strain because its heads are softer and look less seedy than other types. Plant in June, harvest mid to late August. A=1g, ~460 seeds, B=4g, C=28g. 13,000 seeds/oz.



5964 Quaking Grass *Briza maxima* Also known as Totter Grass. An old favorite for floral designers. The large 2½" rattle-like seed heads hang from strong 14-16" stems. A=1g, ~190 seeds, B=5g, C=15g. 5,500 seeds/oz.

5972 Black Sorghum *Sorghum nigrum* 6-8' plants topped with robust oval black inflorescences. Shorter and earlier than other sorghum varieties which often reach 12'. Sorghum, originally from Africa, is cultured in the South for the sweet syrup of its stalks. In the ornamental trade it is used as the focal point for large arrangements, an intriguing choice for contrast. Harvesting the heads at the right stage is an exact science; gotten too early they are not dark enough, too late they may discolor or shatter. A=1g, ~60 seeds, B=4g, C=12g. 1700 seeds/oz.

5982 Spelt *Triticum spelta* Spelt has been cultivated since ancient times. A hardy variety of wheat which is very tough, highly adaptable to our rigorous climate and grows well even in poor soils, Spelt sports a rich golden shaft with somewhat 4-sided 3-5" spikes. Although its spikes are slender and loose, the heads are tough and won't shatter. Spelt is good for braiding because it has a long shaft before the first joint. Heads show quite a color range from green to green-gold to white. A=1g, ~8 seeds, B=3g, C=12g. 225 sds/oz.

5990 Silvertip Wheat x *Triticosecale* Crop failure. *Not available in 1998.* Future plans are undetermined.

PERENNIAL FLOWERS

Seeds per packet for flowers are approximate. They are intended as guides, not guarantees, because we pack by weight, not by count. Available in three sizes except where noted. **Packet weights are listed with each flower.**

Flowers are arranged here by common name. A chart of common uses is on page 49. An index of botanical names is on p. 56.

For other perennials, see #4512, 4776, 4782, 4786, 4806, 4836, 4990, 5705, 5716, 5736, 5846. Also see our Trees & Plants catalog for perennial plant crowns.

6008 Cerise Queen Achillea *A. millefolium* Also known as Pink Yarrow. Easy to grow and tolerant of drought, heat and poor soil. Beautiful cherry-red flower heads 2-4" across on 18" stems with lacy foliage. A good border plant. Zones 3-10. B=.2g, ~1,400 seeds, C=1g. 200,000 seeds/oz. *Not available in smaller sizes.*

6020 Single Alba Baby's Breath *Gypsophila paniculata* Lovely as a border plant in masses, bearing many tiny single white flowers. If cut before fully opened, useful as an everlasting. Seeds may be sown direct, do not cover. Grows to 3'. Zones 4-8. A=.7g, ~940 seeds, B=7g, C=21g. 36,000 seeds/oz.

6028 Blue Clips Bellflower *Campanula carpatica* Masses of light cobalt blue bellflowers cover plants that are only 8" high. A very hardy perennial that is easy to grow, Blue Clips will bloom in sun or partial shade from June to October. Zones 4-10. B=.05g, ~600 seeds. 340,000 seeds/oz. *Not available in larger or smaller sizes.*

6034 Butterfly Weed *Asclepias tuberosa* Also called Pleurisy Root. Native to North America and widely adaptable, this bright sun-loving perennial provides a bold splash of orange color from June until frost. Vigorous mounded 2x2' plants bear broad 5" heads of waxy flowers attractive to butterflies. Both the flowers and pointed seedpods are useful for cut arrangements. Native Americans used it to combat lung and throat troubles and to soothe wounds and sores. Germinates in 3 weeks at 70°. Choose a permanent site with well-drained fertile sandy soil because its tuberous roots do not like to be disturbed. Direct sow in spring or fall. Named by the Xeriscape Demonstration Garden in Plainville, NY, as an exceptionally drought-tolerant performer. Zones 4-9. A=.2g, ~40 seeds, B=.6g, C=1.8g. 5700 seeds/oz.

COLUMBINE *Aquilegia* spp.

To many, columbines are an essential part of the cottage garden or border. Their spurred flowers in mixed colors lure the fairies into the garden. Zones 3-10.

6042 Mrs. Scott Eliot Mixed *A. caerulea* Free-blooming white, red, lavender and pink flowers rising to 30" on strong stems. Pre-chill seed 3-4 weeks. Will bloom 1st season if seeds are sown indoors in early spring. Do not cover. Takes 3-4 weeks to germinate. Likes sun, can tolerate some shade, flowers May and June. Attracts hummingbirds. A=.6g, ~80 seeds, B=1.8g, C=5.4g. 3,800 seeds/oz.

6048 European *A. vulgaris* A much better landscape plant than Mrs. Eliot or McKana's Giants because its leaves will remain green through the whole season. Blossoms are mostly pink, with a few purple and white shades. Likes moist well-drained soil, sun or partial shade. 2½'. A=.3g, ~240 seeds, B=1.2g, C=6g. 22,500 seeds/oz.

6054 Goldsturm Coneflower *Rudbeckia fulgida* A profusion of shining golden yellow flowers with dark central cones in August and September. Hardy perennial transplants well and has larger flowers (up to 5" across) than its wild counterpart (Black-Eyed Susan). The 2' plants have long, strong stems ideal for cutting. Zones 3-10. A=.1g, ~90 seeds, B=.4g, C=1.2g. 25,000 seeds/oz.

Prices for perennials #6008-6336:
A=65¢, B=$1.80, C=$5.00.

CORAL BELLS *Huechera sanguinea*

Named for Johann Heinrich von Heucher, a German botanist. Their dwarf, compact habit make coral bells excellent for low borders and rockeries. They like good soil and partial shade, but will tolerate full sun. Zones 4-10. 560,000 seeds/oz.

6062 Bressingham Hybrids Palest pink to deepest crimson sprays of graceful bells rise from 18" hardy plants of heart-shaped foliage. Start indoors in cool place 8-10 weeks before setting out. Need light to germinate. A=.02g, ~400 seeds, B=.1g, C=.3g.

6064 Purple Palace This striking perennial border plant stood out in our tour of Zone 4 Perennials' gardens in Sidney. Its showy 12" ivy-shaped mahogany-red leaves (discard the few plants that make green foliage) make it an attractive ground cover. Its small white bell-shaped flowers are insignificant. Divide and sidedress every three years. B=.02g, C=.1g *Not available in smaller sizes.*

6068 Early Sunrise Coreopsis *C. grandiflora* 1989 AAS was based on its ability to bloom weeks earlier than other Coreopsis varieties. Dense well-branched 18" plants are loaded with 2" semi-double vivid yellow blooms. Start indoors in cool place 6-8 weeks before setting out in sunny spot. Do not cover seed. Leave dead foliage on plant until spring. Zones 3-10. B=.1g, ~40 seeds, C=.5g. 12,000 seeds/oz. *Not available in smaller sizes.*

DELPHINIUM spp.

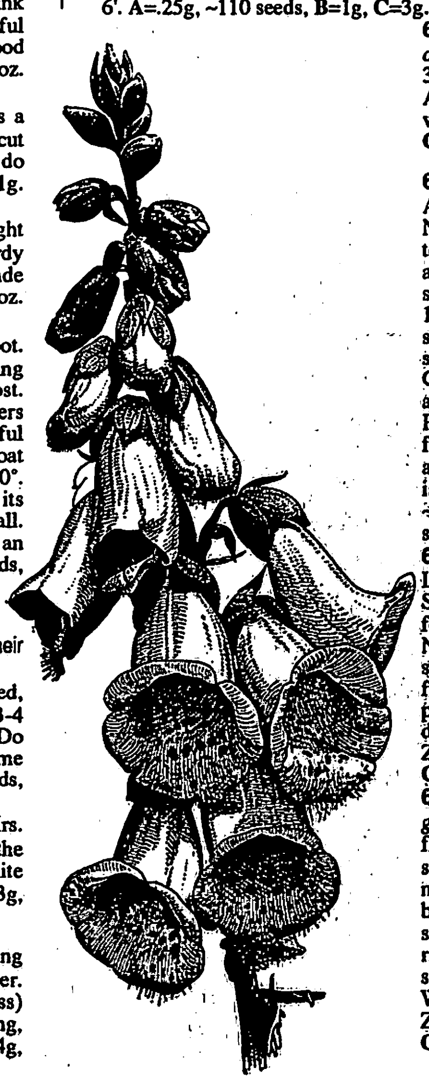
Stately dense racemes make delphinium popular as a background plant, as a mass in the border, and as a cutflower. Likes sun, can tolerate some shade. Heavy feeder; sidedress in spring with well-composted manure. Zones 3-7. All types 13,000 seeds/oz.

6080 Astolat Pacific Giant *D. x elatum* Pastels of lilac, raspberry and rose with dark bees. 6'. A=.2g, ~90 seeds, B=.6g. *Not available in larger sizes.*

6084 Black Knight Pacific Giant Intense dark purple with black bees. Stately and breathtaking. 6'. Last offered in 1986. **BACK!** A=.2g, ~85 seeds, B=.6g, C=1.8g

6088 Summer Skies Pacific Giant Light heavenly blue with white bees. 6'. A=.25g, ~110 seeds, B=1g, C=3g.

6094 King Arthur Pacific Giant Velvety royal purple with white bees. 6'. A=.25g, ~110 seeds, B=1g, C=3g.



6098 Connecticut Yankee Mix *D. x cultorum* Dwarfed version grows only 3'; good where wind is a problem. 1965 AAS in blue, purple, lavender and white. A=.25g, ~110 seeds, B=1g, C=3g.

6110 Foxy Digitalis *D. purpurea* Also known as Foxglove. 1967 AAS. No wonder customers clamored for us to get Foxy. A breeding breakthrough allows this biennial to bloom the first season. Foxy starts blooming when only 18" high—just five months from seed—and continues with up to nine spikes apiece as it grows to a mature 3'. Germinates at 70-75° in about one week and grows easily in sun or part shade. Foxy's thimble-shaped flowers range from cream yellow to pinks, with many attractive spotted markings. Entire plant is poisonous. Zones 4-10. A=.1g, ~1,000 seeds, B=.4g, C=1.2g. 272,500 seeds/oz.

6120 Blue Flax *Linum perenne* subsp. Lewisii Also known as Prairie Flax. Single light-blue flowers with finely cut foliage for borders or rock gardens. New flowers open every morning all summer, fade in afternoon heat. Likes full sun. 9-12". Start indoors in a cool place 6-8 weeks before setting out or direct seed in cool soil in spring or fall. Zones 4-9. A=1g, ~750 seeds, B=7g, C=28g. 21,000 seeds/oz.

6130 Grandiflora Mix Gaillardia *G. grandiflora* Also known as Blanketflower. Easily grown perennial sports showy fringed daisy-like flowers of maroon red edged in gold which will bloom from June to frost. Strong 2½' stems are good for cutting. Will blend right into fall arrangements. Prefers dry, sunny locations to moist fertile ones. Will bloom the first year if sown early. Zones 3-9. A=.25g, ~85 seeds, B=1g, C=4g. 9,500 seeds/oz.

HOLLYHOCK *Alcea rosea*

An old-time favorite for background color. Biennial, will reseed in good year. Needs staking. Cut flower stalk to induce rebloom. Likes full sun, lots of room, and moist soil. Seed may require alternate freezing and thawing to break dormancy. Germinate in 10 days at 70°F. Start indoors in a warm place 2 mos. prior to planting. Zones 3-8. 3,240 seeds/oz.

6140 Chater's Double Mix Double flowered in shades of red, pink, yellow and white. 4-5'. A=1g, ~115 seeds, B=5g, C=15g.

6146 Indian Spring Single Mix Customers asked us to find an old-fashioned single. 7' beauty favored by hummingbirds in shades of red, yellow, white and rose. 1939 AAS. A=.25g, ~25 seeds, B=1g, C=3g.

6152 Black Hollyhock *A. r.* var. *nigra* Shimmering burgundy-black single flowers characterize this heirloom hollyhock which blooms the second year. Biennial lasts 3-4 years in favorable conditions. Surface sow inside in April. Overly rich potting mixes will encourage damping off. Seed organically grown in the western mountains of Maine. This may be the same black hollyhock grown by Thomas Jefferson at Monticello. Replaces Watchman A=.25g ~32 seeds, B=1g, C=4g. 3,800 seeds/oz. NEW!

6170 Helen Mount Johnny Jump Up *Viola tricolor* Also known as Heartsease Pansy. This 4-6" favorite bears tricolor blooms in violet, lavender, and canary yellow. Small abundant flowers like partial shade. Can be direct seeded early spring for flowers late in season or sown in fall for earlier blooms the following year. Some call it invasive, others enjoy its cheerful spreading habit. Flowers make edible decorations with a faint wintergreen taste. Zones 3-9. A=.5g, ~450 seeds, B=1.5g, C=4.5g. 25,500 seeds/oz.

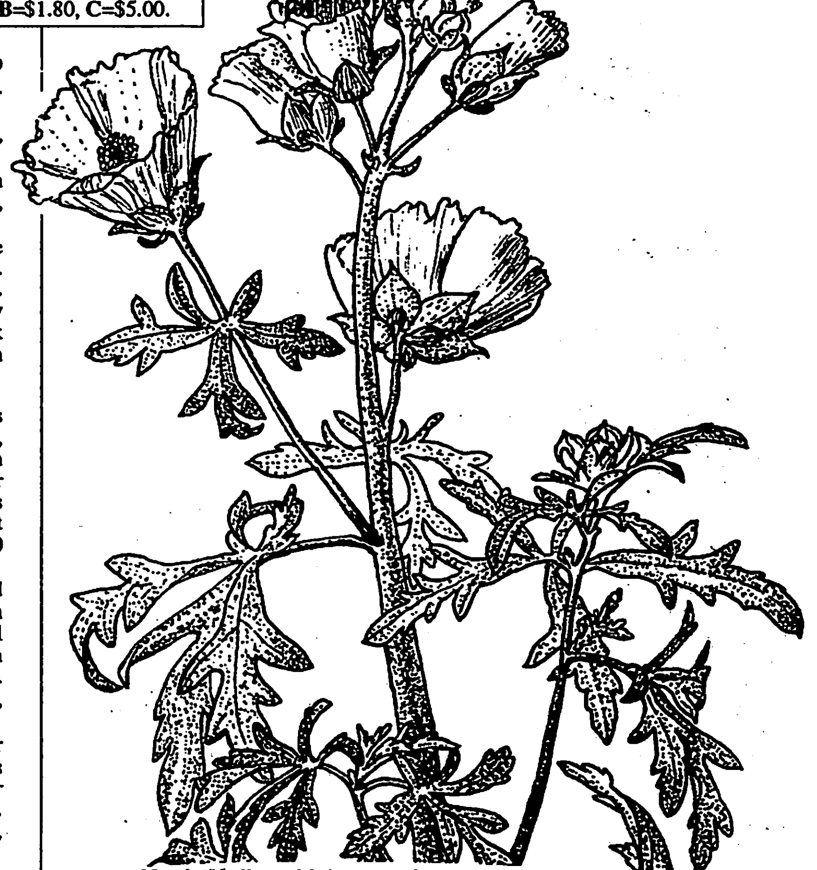
6186 Russell Hybrids Choice Mix Lupine *Lupinus polyphyllus* Bred by George Russell of York, introduced 1937, won coveted Gold Medal from the Royal Horticultural Society. Dense spikes with large flowers in full range of colors. They like a cool, moist spot and sandy soil. Can be sown indoors in late winter, or outdoors in early spring or late fall in full sun. 3'. Seeds and seed pods are poisonous. Zones 4-9. A=1.4g, ~75 seeds, B=7g, C=28g. 1,400 seeds/oz.

6196 Maiden Pink *Dianthus deltoides* Known as pinks, not for their color but for their serrated petals which look pinked, these low-growing 6" plants thrive in shade. Dense green mat topped with flowers blooming all summer in a variety of bright red, purple magenta, pink and white with a red ring. Likes sun, well-drained to dry soil. Zones 2-10. A=.05g, ~275 seeds, B=.2g, C=1g. 157,000 seeds/oz.

6204 Maltese Cross *Lychnis chalcedonica* Very desirable 3' border plant, also known as Red Campion, excellent for cutflowers. Produces brilliant scarlet florets in a five-part cross, attracts hummingbirds. Makes a hot color combination with coneflowers and gaillardia. Thomas Jefferson grew these at Monticello in 1807. Start indoors in early spring or midsummer for blooms next year. Do not cover seeds. Like moist soil and full sun. Zones 3-10. A=.4g, ~55 seed, B=2g, C=6g. 4,000 seeds/oz.

6214 Mountain Bluet *Centaurea montana* Also known as perennial Bachelor's Button. Native to the mountainous regions of central Europe. Airy 2½" flowers of violet-blue with purple centers are borne on bushy 2' plants. Easy to grow, they like a well-drained sunny location. Blooms July through frost. Zones 3-8. A=.25g, ~20 seeds, B=1g, C=4g. 2,150 seeds/oz.

Prices for perennials #6008-6336:
A=65¢, B=$1.80, C=$5.00.



6224 Musk Mallow *Malva moschata* Also known as Musk Rose. The perennial counterpart to annual lavatera, hardy to zone 4a, possibly zone 3, 1-3' plants produce abundant 2" rose or white flowers in mid-late summer on dark green deeply toothed foliage. Soft leaves exude a musky fragrance when rubbed or brushed. A classic cottage garden flower which tolerates dry soil and thrives in sun or partial shade. Was also valued as an herb for soothing inflammations. A=.2g, ~100 seeds, B=.6g, C=2.4g. 14,000 seeds/oz.

6234 New Hybrids Mix Phlox *P. paniculata* F-1 hybrid. Perennial phlox blooms from June till frost. Excellent for borders and cutflowers. Mix of whites, pinks, reds and lilacs. Freeze seeds 10 days before sowing indoors, or direct seed in cold soil. Slow germinator, takes 3-4 weeks. Likes full sun. 3'. Zones 3-9. B=.25g, ~20 seeds, C=1g. 2,500 seeds/oz. *Not available in smaller sizes.*

6244 Gartford Giants Mix Poppy *Papaver nudicaule* Known as Iceland Poppy. Delicate white, yellow, gold, apricot, orange blossoms from May to frost. Direct seed in spring in a sunny spot. 1'. A=.4g, ~2,500 seeds, B=4g, C=12g. Zones 2-8. 174,000 seeds/oz.

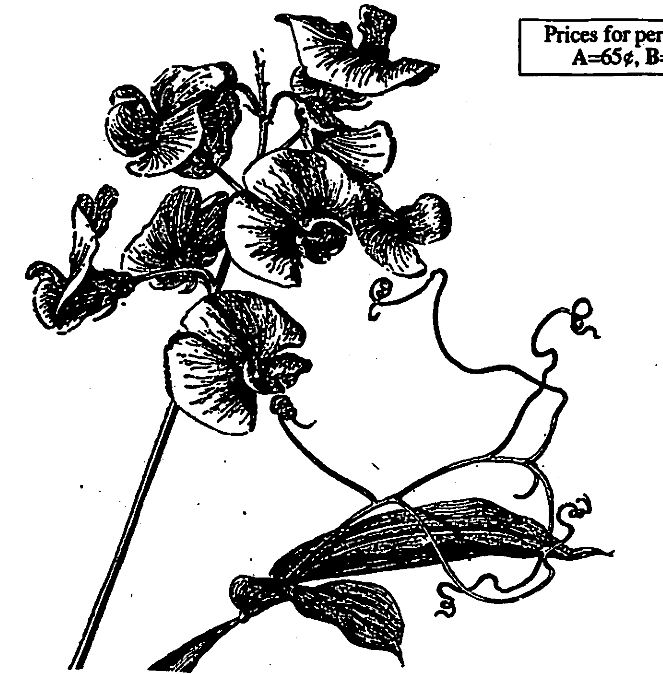
6254 Dwarf Allegro Oriental Poppy *P. orientale* Long-lived perennial grows 16". Fern-like leaves, showy buds, opening to dazzling scarlet flowers with contrasting black eyes. Sow in June, transplant in October for flowers the following summer. Plant alongside border perennials and ornamental grasses. Zones 2-8. A=.05g, ~250 seeds, B=.2g, C=.6g. 145,000 seeds/oz.

6262 Potsdam Mix Primrose *Primula vulgaris* These tidy harbingers of spring burst forth with a shot of bright color just when it's most needed, in late April or early May. Resembles small bouquets in pink, blue, yellow and red with yellow centers. Most attractive massed in a low border planting or under a canopy of trees. They prefer a moist, well-drained soil high in organic content in partial shade. Some seasons a second full blooming will poke through the carpet of autumn leaves. Zones 3-8. A=.04g, ~35 seeds, B=.12g, C=.6g. 900 seeds/gram.

6272 Alaska Strain Shasta Daisy *Chrysanthemum x superbum* 3'. Clean white flowers with bright yellow centers make good home-garden cutflowers and border plants for sunny locations. Looks good with gaillardia and coreopsis. One of the easiest perennials to grow; will usually bloom first year if started indoors in spring and transplanted when soil warms. Zones 4-10. A=.5g, ~475 seeds, B=4g, C=16g. 27,000 seeds/oz.

6282 Red & Gold Hybrids Sneezeweed *Helenium autumnale* Also known as Sunny Bride. A rich chromatic scale of bronze, brown, crimson and yellow shades for an end-of-summer display. Single flowers resemble coreopsis but have a large center "button" like coneflower atop 4' plants. Combine with asters and phlox for great late-season color. Not fussy, easy to grow, excellent for cutting. At its prime when most perennials have finished blooming. Zones 3-10. A=.1g, ~500 seeds, B=.3g, C=.9g. 142,000 seeds/oz.

Prices for perennials #6008-6336:
A=65¢, B=$1.80, C=$5.00.



6296 Perennial Sweet Pea *Lathyrus latifolius* The traditional English cottage sweet pea, grown by Jefferson in 1771, thrives in cool climates, loves sun, climbs 6' and is useful as a screen. Comes in shades of rose, white and pink in big clusters. Good cutflowers. Soak seeds up to 24 hours before sowing outdoors in early spring. Can take 3-4 weeks to germinate. Zones 3-10. A=1g, ~20 seeds, B=3g, C=12g, 1lb @$70.00. 600 seeds/oz.

6306 Double Choice Mix Sweet William *Dianthus barbatus* A fragrant biennial in red, pink, white, lavender or mixed colors. Germinates in 7-14 days at 70°. May be started 2 mos. before setting outdoors, or sown where it will grow in late summer or fall. Requires full sun and good drainage, likes lime. 18". Zones 4-10. A=.5g, ~475 seeds, B=7g, C=28g. 26,600 seeds/oz.

6316 Creeping Thyme *Thymus serpyllum* Also known as Mother-of-Thyme or Brotherwort (not to be confused with Motherwort!). Creeping sweet-scented ground cover with purple flowers good in rock gardens, between stepping stones, or on dry slopes. Likes good drainage, full sun and alkaline soil. Plants grow slowly from seed, may be started indoors 2 mos. before planting, or outside in early spring or fall where they will grow. Sow thickly, do not cover seeds. 2". Zones 3-10. A=.1g, ~800 seeds, B=1g, C=3g. 224,500 seeds/oz.

6326 Sightseeing Mix Veronica *V. spicata* Also known as Speedwell. A wonderful mix of pink, white and blue-violet flowers which are glorious when they're all blooming together. Growing uniformly to 2-2½' with erect, pointed spikes, makes a great border, also a superb cutflower. Will bloom the first year if started early indoors. Zones 3-8. B=.05g, ~400 seeds. 225,000 seeds/oz. *Not available in larger or smaller sizes.*

6336 Wildflower Mix for the Northeast. A blend of 20 perennial and self-sowing annual species native to or naturalized in northeast US and Canada. Includes Dame's Rocket, Black-Eyed Susan, Shirley Poppy, Blazing Star and Bachelor's Button. Start in cool place indoors two months before setting out, or broadcast in spring or fall in a seedbed in a sunny spot. A=1.4g, ~3,000 seeds, B=7g, C=28g, 1lb @$30.00. 60,000 seeds/oz.

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Petunia x hybrida	5638-44
Phlox drummondii	5312
P. paniculata	6234
Physalis alkekengi	5736
Pimpinella anisum	4406
Portulaca grandiflora	5652-56
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Psyllostachys suworowii	5852
Reseda odorata	5262
Rosmarinus officinalis	4656
Rudbeckia hirta	5072
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Ruta graveolens	4936
Salpiglossis sinuata	6884
Salvia farinacea	5363
S. officinalis	4664
S. patens	5362
S. splendens	5662
S. viridis	5804
Satureja hortensis	4672
Scabiosa atropurpurea	5316
S. stellata	5810
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Scuttelaria lateriflora	4964
Setaria macrocheata	5958
Silybum marianum	4872
Sorghum nigrum	5972
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Tanacetum parthenium	4786
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Trachymene coerulea	5144
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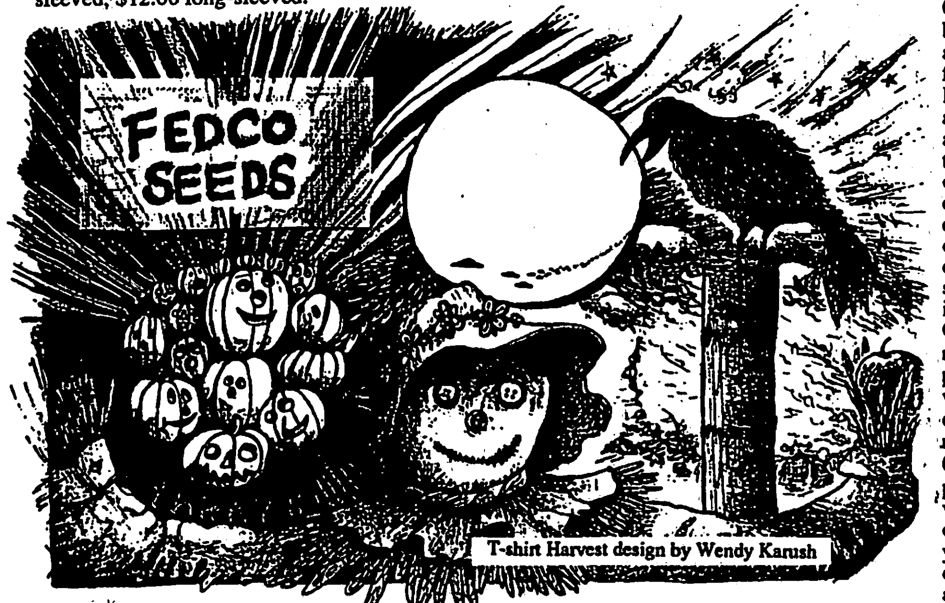
Xeranthemum annuum	5770
Zea mays	5940
Zinnia elegans	5470-74,5482-93,5690
Z. haageana	5478

BOOKS *Liber diversus*

6500-6501 T-Shirts Natural unbleached 100% cotton short-and long-sleeved beefy T's. Sizes are medium (38-40), large (42-44) and extra-large (46-48). Short-sleeved with deep forest green design on rust background has been adopted as the official team uniform of the Colby College Cockfighters ultimate frisbee team. Long-sleeved features rust-colored pattern and lettering on ecru background. Harvest design by Wendy Karush, printed by Liberty Graphics of Liberty, ME. Close-out sale, price reduced. $9.00 short-sleeved; $12.00 long-sleeved.



T-shirt Harvest design by Wendy Karush

6508 **A Biodynamic Farm** by Hugh Lovel, 215 pages, 6x9, softcover. Intrigued by biodynamics, but find some of its principles esoteric or downright inaccessible? Always wanted to know what's in those mysterious BD preparations and how and why to use them? To date, Lovel's treatment is the most straightforward available. He is even critical of some initiates who wanted to keep the details secret. He gets off to a good start with a serious 34-page glossary! Biodynamics is much more than another system of agriculture and Lovel's book is more than just another look at agriculture. It examines the meaning of words, how language can mislead and beguile, and what social and political calamities can result. All of us are familiar with the force of gravity as an explanation for how the apple falls from the tree. But can any of us explain how the apple got up there in the first place? Could there be another force we have forgotten? $17.00

6510 **Biopiracy: the Plunder of Nature and Knowledge** by Vandana Shiva, 148 pages, 5½x8½, softcover. The biggies who control the seed trade invoke the necessity of protecting and strengthening intellectual property rights like a refrain. But noted Indian physicist Vandana Shiva has a contrary view, likening the appropriation of indigenous knowledge and patenting of life forms by transnational corporations to the second coming of Columbus. As the Papal Donation of 1493 granted all the fruits of exploration to the monarchs of Spain, so does the General Agreement on Tariffs and Trade (GATT) grant ownership of all undiscovered life-forms to western corporations. Having colonized, eroded and polluted externalities such as land, forests, rivers and oceans the exploiters have now invaded the internal spaces of the bodies of women, plants and animals. In a pithy compelling passionate essay, Shiva asks us to resist this new wave of exploitation which is being carried on under the misnomer of "free trade." NEW! $14.00

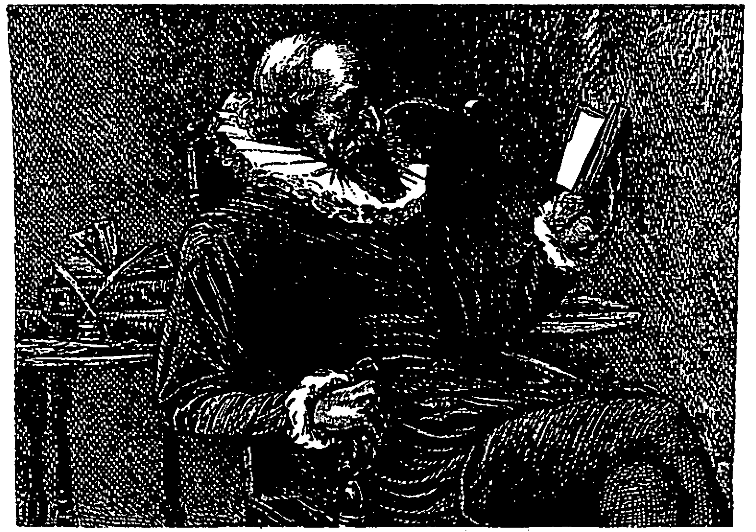
6512 **Botany for Gardeners: an Introduction and Guide** by Brian Capon, 220 pages, 6x9, softcover. If they had given me this book in high school I would have liked and understood biology. Capon demystifies each technical term he introduces by recounting its often humble derivations. It was news to me that the word chromosomes means "colored bodies" because they take stain so readily. Less intimidated by chromosomes, I now understand meiosis and mitosis, and so could you. By grounding the details in familiar plants, Capon brings clarity to plant form and the processes of growth. His instructive line drawings and color photos help, too. My favorites are his magnified cross sections of stained cells that make plants almost as beautiful and lovable at the microscopic level as they are in the garden. NEW! $17.50

6514 **Calypso Bean Soup and Other Savory Recipes** by Lesa Heebner, 100 pages, 7⅝x9, softcover. Who can resist the beauty of dry beans, the jewel-like black of Turtle, the deep reddish hues of Vermont Cranberry, the delicate charcoal hilum on Hutterite soup beans, or the black and white orca markings of the Calypso? We touch them, we roll them from hand to hand, we covet their beauty, we collect them and eventually we savor their rich and varied flavors. Heebner prefaces each of her deliciously tempting and varied recipes with a paragraph or three about the legend, lore, origins, unique characters and flavors of the featured heirloom bean. Includes appetizers, side dishes, salads, soups, stovetop and oven dishes, plus bean basics and tips. High protein reading with very little fat. NEW! $13.00

6515 **Caring for Perennials: What to Do and When to Do It** by Janet Macunovich, 191 pages, 8½x11, softcover. You can accomplish a lot in 15 minutes of focused work. You could, for example, successfully stake several drooping plants. Macunovich believes that if you follow her system, an average of 15 minutes per week will be sufficient to maintain a 10x10' perennial garden. She knows we don't have the time to do everything so she stresses prioritizing what needs to be done to keep the garden going. Her directions are clear enough to instruct beginners, yet creative enough to interest even experienced perennial gardeners. Using her own detailed 12-year records and working one simple bed with 36 cultivars, she takes you through a gardening year telling what she did to keep the bed beautiful, how, when and why and illustrates with color photos and instructive line drawings. Chapters on pruning; edging and weeding; dividing and mulching; and watering, fertilizing, planting and staking provide more detailed information. Includes a useful table with month-by-month maintenance recommendations for 70 different perennials. Enjoy a beautiful perennial garden with much less work! NEW! $17.50

6516 **Chez Panisse Vegetables** by Alice Waters, 344 pages, 7x10¼, hardcover. Wow, a cookbook that discusses vegetables by varietal names!...and focuses on how to pick out ones of the highest quality and keep them that way until you're ready to cook...and offers a dazzling repertoire to choose from: asparagus, shallots, cardoon, garlic, leeks, artichokes, chicories as well as the more common vegetables! No wonder food writer and gardener extraordinaire Roberta Bunker said we *had* to carry this book! I was enchanted by the elegant simplicity of many of these recipes. I never would have thought of caramelizing fennel using just olive oil then seasoning with salt and pepper and serving as a pizza topping. My impatient vigil for the first peas of the season got shorter since I started cooking pea vine shoots in early spring thanks to Waters. Put the still-damp shoots in a hot frying pan with oil or duckfat, season with salt, toss until just tender and lustrous green. Add a splash of water and serve. Says Waters, "handling... a vegetable in the kitchen before it is eaten is far less important for taste than what kind of variety it is, where and how it was grown, when it was harvested and how long it has taken to get to your kitchen. Cooking is only a small part of this." If Waters is right, Fedco customers already have a leg up in their quest for sublime eating experiences. $32.00

6518 **The Complete Book of Gourd Craft** by Ginger Summit and James Widess, 144 pages, 8¾x10½, hardcover. Browsing through this sumptuous, full color guide to decorating gourds is like taking a walk through a museum. It will leave you gasping with pleasure, laughing with delight and generally awestruck. Three hundred inspirational photographs of gourd artistry will help guide you through 22 projects. Employs 55 decorative techniques and materials including woodburning, carving, painting, staining, waxing, basketry, inlay, weaving, decoupage, attaching pieces, making handles, lids and more. Plenty of how-to photographs and detailed easy-to-follow instructions. For beginner and experienced gourders, includes horticultural basics; cleaning, cutting and finishing tips; seed and supply sources. NEW! $26.00



6520 The Complete Medicinal Herbal: A Practical Guide to the Healing Properties of Herbs by Penelope Ody, 192 pages, 8x11$^3/_4$, hardcover. As informative as it is beautiful, this easily accessible and useful reference is also a visual feast. It will invite you to linger for long hours with its extraordinary photographs or provide you with a rapid reference to practical details such as where to find the flavonoids in burdock. An A-to-Z of over 120 herbs with detailed photographs of the parts used medicinally, descriptions of traditional uses, active ingredients, therapeutic principles, proper preparations and dosages offers the most graphic herbal instruction course I've ever seen. Not your usual plant drawings here: You'll see close-up photos of the active parts—be they seed, root, leaf or bark—and dishes and jars of the tinctures, ointments, creams and oils in their true colors.

Your immune system need strengthening? A reference section arranged by ailments and sprinkled with case histories leads you to two possible remedies (astragalus and echinacea), with their actions, suggested uses and dosages and proper precautions. Why do the Chinese use schizandra in the spring? What was Gandhi's opinion about flax seed? Why did overindulgent Romans eat raw cabbage? From the fabulously illustrated first chapter which "looks at the major herbal systems in different parts of the world throughout the ages," to the detailed reference materials in the last chapter, this book will satisfy and delight as it instructs. $30.00

6530 1997 CSA Farm Network ed. Steve Gilman, 96 pages, 8$^1/_2$x10$^1/_2$, softcover. A series of articles about issues facing the growing Community Supported Agriculture movement. Network visits CSA from various perspectives with an emphasis on research about current CSA practises and consumer preferences. The directory has been extended to include the entire country. Find out how close you are to the nearest CSA or find progressive agricultural organizations in the excellent resource appendix. $8.00

6538 Edible Flowers from Garden to Palate by Cathy Wilkinson Barash, 250 pages, 8$^1/_2$x9, softcover. While at a NOFA-NH gathering last December I was enchanted by a talk given by flower expert Hillary Nelson who recommended Barash's volume as the best in the field. Beginning with her big ten, which includes nasturtiums, pansies, signet marigolds, squash blossoms and sage, Barash branches out to such lesser known delights as rosemary, fennel and radish flowers. Her elegant yet simple recipes, drawn mostly from noted restaurant chefs, make gastronomic leaps. Imagine using sage as your major pesto ingredient, scarlet runner bean flowers sautéed with potatoes and onions, or southern frying okra blossoms. Barash warns that some flowers are poisonous while others should be consumed only in moderation. Insist on organically grown flowers. Never eat flowers picked from the side of the road. Introduce new flowers into your diet in small quantities. Above all, know what you're eating. For example, young pea shoots, tendrils and flowers are edible, while the flowers of ornamental sweet peas are poisonous. NEW! $24.50.

6546 The New Organic Grower's Four-Season Harvest by Eliot Coleman, 206 pages, 8x10, softcover. Four-Season Harvest, another gardening classic by Coleman, does for home gardeners what his New Organic Grower did for commercial growers. If, instead of stale California iceberg lettuce and Mexican hothouse tomatoes, you'd prefer your February salad to be made from fresh mâche, claytonia and arugula, Coleman tells you how to do it. Key to his system is extending the harvest season by succession planting and crop protection, using low-tech homemade devices such as cold frames and tunnels. His prose is practical, yet poetic: "Do you want return on investment? One tomato seed, yielding at least 1000 to 1 in four months, makes even the highest fliers seem paltry. Are you fascinated by design and miniaturization? The finest computer is but a crude makeshift device beside a tomato seed..." $20.00

6547 The Fragrant Garden: A Book about Sweet Scented Flowers and Leaves by Louise Beebe Wilder, 407 pages, 5$^1/_2$x8$^1/_2$, softcover. Who has not thrilled to that ecstatic first whiff of spring in the air? Who has not savored the rich redolence of freshly-turned earth? Who has not been stirred by the fecundity of April's misting rains? "Fragrance speaks to many to whom colour and form say little and it can bring as irresistably as music emotions of all sort to the mind." Yet, laments Wilder, gardeners today seldom plan for fragrance, an omission which can be readily remedied by taking her garden tour through the seasons. Reprint of a 1932 classic originally published as The Fragrant Path. $8.00

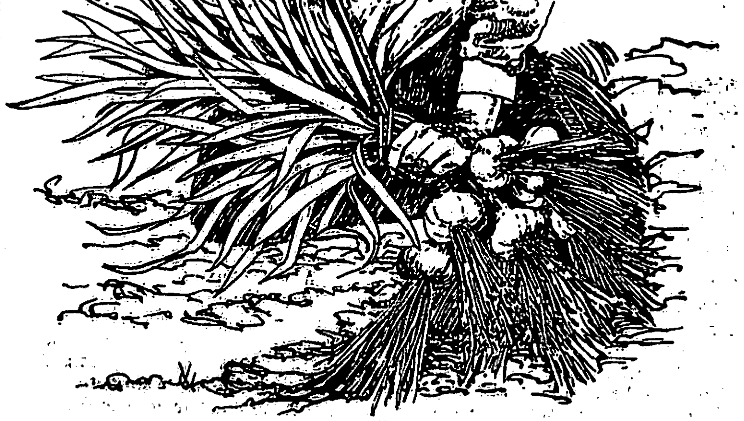
6550 The Gardener's Guide to Common Sense Pest Control by Sheila Daar, William and Helga Olkowski, 304 pages, 8x10, softcover. Thorough and readable introduction to Integrated Pest Management for home gardeners by the founders of the Bio-Resource Center of Berkeley, CA, the publishers of *The IPM Practitioner* and *Common Sense Pest Control Quarterly*. Part 1, 'The Basics,' covers the principles of IPM: identification, monitoring and evaluation; strategies for pest management, the uses of beneficial insects, chemical and biological controls and promising new strategies. Part 2 describes pests, including not only insects and other animals but also weeds and diseases, in gardens, lawns and orchards. Each chapter concludes with suggestions for further reading. Frequent charts and sidebars arrange the data in useful and accessible fashion. An information-packed resource. NEW! $20.00

6554 Garden Flowers Coloring Book by Stefen Bernath, 40 pages, 8$^1/_4$x11, softcover. These 40 popular flowers, 37 of which are offered by Fedco, cover almost the entire spectrum of color. Dover book includes color plates on the cover to guide young illustrators. $2.80

6560 Gardening for Fragrance ed. by Tania Bayard, 96 pages, 6x9, softcover. Delightful Brooklyn Botanic Garden booklet invites you to delve into the biological aspects of scent and to consider the lore of perfume before strolling into the garden to visit its most fragrant plants. A series of short essays filled with alluring descriptions, fertile ideas and practical advice cover many old favorites from our selection including Sweet Annie, sweet peas (especially the older grandiflora varieties), nasturtiums (the name means 'nose-turning'), mignonette, pincushion flower, and the intoxicating woodland tobacco *Nicotiana sylvestris*. Come along the scented path and delight in the fragrance the herb garden and the old-fashioned roses. Step through the aromatic landscape plants and into the house filled with fragrant houseplants. Start learning how to preserve the fragrance of your harvest. Then go for a nocturnal stroll to sample the rare aromas of a small group of night bloomers. When you finally achieve olfactory overload, perhaps you'll want to peruse the bibliography. "Smell," wrote E.F. Benson, "is the most memoristic of the senses." Reduced for clearance. $6.00

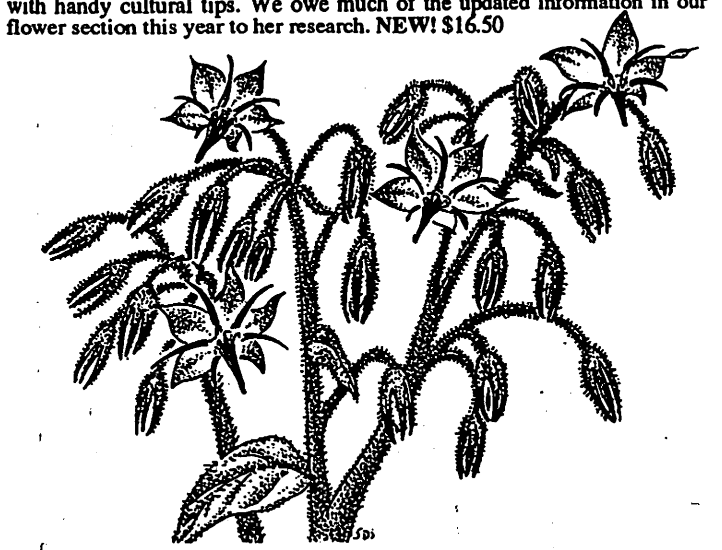
6575 Give Peas a Chance: Organic Gardening Cartoon Science by Peter Barbarow, 222 pages, 8$^1/_2$x11, softcover. A soil-building book in the same vein as Marx for Beginners. Barbarow takes the dense soil particles of a potentially sticky topic, and breaks them into friable humus with that finest of amendments: humor. Although perhaps not 100% scientifically rigorous, Barbarow makes his points with creative comparisions. For example, "What is a seed? A seed is a space ship. The space ship contains a tiny astronaut (the embryo), and all the stored food reserves and rocket fuel (proteins, oils, starch) the astronaut will need during his long journey through the cold dark limits of earthly winter." Other comparisons feature the compost pile as a pet animal, the damping off-fungus as a lumberjack, and photosynthesis as the "state-of-the-art in energy technology, micro-miniaturized to a scale that makes the best efforts of the electronic industry look hopelessly stone-age." A good choice for a beginner's first gardening book; plenty for the grizzled gardening veteran as well. Reduced for clearance. $13.00

6584 Growing Great Garlic by Ron L. Engeland, 213 pages, 6x9, softcover. Garlic, the world's second most important allium crop, behind onions, is rapidly winning new converts. If garlic is your passion, or even just your avocation, you'll enjoy this book. Engeland, an expert who successfully grows and sells over 100 strains and even markets a paper he makes from the discarded bulb wrappers, has written the definitive guide to growing garlic. He devotes thirty pages to varietal differences, adds a fascinating chapter on history, and provides in-depth cultural information on growing, harvesting, storing and marketing garlic. $14.00



From Growing Great Garlic by Ron Engeland.

6585 The Heirloom Garden by Jo Ann Gardner, 240 pages, 7$^1/_4$x9, softcover. Whether you'd like to grow a colonial settler's cottage garden, a native flora garden, a Victorian garden or just an eclectic old-timey garden without gaudy hybrids, Gardner will inspire you. She profiles hundreds of old favorite garden ornamentals, interweaving rich historical background with handy cultural tips. We owe much of the updated information in our flower section this year to her research. NEW! $16.50



6586 Herbal Note Cards by Sue Szwed. A great way to send healing energy to your friends, this set of six cards features some of our favorite illustrations from The Roots of Healing (see #6660). If you haven't read the book, glance through Fedco Seeds' catalogs to find other examples of Sue's work, including our 1995 cover. Borage, heartsease pansy, yarrow, mugwort, dandelion and sarsaparilla root are illustrated, with a brief note about usage on the back. Blank inside, printed on pastel shades of lavender, cyprus green, white, bluestone, yellow gold and rose recycled paper, the 4$^1/_4$x5$^1/_2$" cards with black line art come with matching envelopes. $5.50

6588 Hort Ideas Published monthly by Greg and Pat Williams. An invaluable newsletter full of intriguing summaries of the latest research on a wide variety of horticultural topics including trees, shrubs, vegetables, flowers and horticultural products and accessories. Topics in a recent issue ranged from the risks of genes escaping from genetically engineered plants to how to join the N. American Sea Plant Society, subscribe to the Worm Digest or make homemade tree guards. We discovered many of the books in this section through reading reviews in Hort Ideas. $20.00

Another
TIP FROM MR. TURDLEY

THE SECRET

to composting humanure is to keep it covered.

Always cover toilet deposits thoroughly with a clean, organic cover material such as rotting sawdust. When depositing humanure onto a compost pile always cover the deposit with another cover material, preferably a coarse one such as straw or weeds. Proper cover materials eliminate odors and flies, and balance the nitrogen in the humanure.

THE HUMANURE HANDBOOK - CHAPTER SEVEN: THE TAO OF COMPOST

6594 The Humanure Handbook by J. C. Jenkins, 198 pages, 7$^1/_4$x9, softcover. To paraphrase the late great Lenny Bruce, "everybody does it, nobody talks about it." Jenkins talks about it. He does not lead you in gently. He gets in your face about it. His is a self-published manifesto. He is outraged that each of us wastes nearly a thousand pounds of humanure every year, deposited in sewers and septic systems throughout the land. What does that have to do with the state of our agriculture? Everything. Americans, according to Jenkins, squander nearly 250 million tons of solid waste each year. Meanwhile, global consumption of artificial fertilizers rose by almost 900% from 1950 to 1980. The charts and graphs in his first chapter make the inescapable connections. Nevertheless, many of us will still be horrified that Jenkins advocates the use of humanure as a fertilizer. Why are we Westerners so fecophobic? Jenkins is not shy about probing our psychological hangups which ultimately he ascribes to "worms and disease"! Neither is he afraid to address the scientific basis for our qualms nor to advocate solutions which he believes can overcome those legitimate fears. The answer, says Jenkins, is to use low-tech sawdust toilets and to thermophilically compost our refuse into rich pathogen-free humus for our gardens. And he goes into the details about how to do it, based on his own 15 years of experience. Not convinced? Ponder Jenkins' opening paragraph: "The world is divided into two categories of people: those who shit in the drinking water and those who don't. We in the Western world are in the former class...After polluting the water with our body's digestive system byproducts, we flush the once pure but now polluted water 'away.' Away to where? Good question." Many of us think "shit" is an obscenity. Maybe Jenkins will do to our concept of shit what Bruce did to the concept of obscenity! $18.00

6602 Identifying Diseases of Vegetables by A.A. McNab, A.F. Sherf, and K.K. Springer, 62 pages, 8$^1/_2$x11, spiralbound softcover, University of Pennsylvania. Was that hideous sunken black spot near the stem of your tomato caused by *Alternaria solani* or by *Colletotrichum coccodes?* Excellent photographs facilitate accurate disease identification. Includes all the popular vegetables and all the common diseases which affect them. $15.00

6610 The Insect Workbook by the Entomological Society of America, 80 pages, 8$^1/_2$x11, softcover. Revised edition of this Fedco family staple formerly entitled Coloring Fun with Insects. We sold over 700 copies of the first edition. Forty drawings of common insects for coloring, with non-pejorative information about each insect's natural history. Gives elementary-age kids a chance to have fun while learning some basic entomology, and raises everyone's consciousness about insects. Now includes step-by-step instructions which enable kids to conduct their own field studies as well as build pit traps and ant farms. $5.50

6612 Integrated Pest Management for Potatoes in the Western U.S. by the Western Regional IPM Project, 146 pages, 8$^1/_2$x10$^3/_4$, softcover. Don't let the title fool you. Whether you plant in Maine or Idado, this is *the* book for potato growers. Not restricted to pest management, it tells everything you need to know about growing potatoes. Discusses the four components of IPM: accurate pest identification, field monitoring, control action guidelines and effective management methods. "In an IPM program pest management is coordinated with production practices to achieve economical protection from pest injury while minimizing hazards to crops, human health, and the environment." Graphic photographs will help you identify insect and other animal pests, diseases of leaf and tuber including bacterial, viral and fungal infections, developmental disorders and weeds. The accompanying text offers management strategies for control and prevention, whether you are troubled by the parasitic weed dodder, the viral-transmitted corky ringspot, or any of dozens of other potato pathogens. Appendix includes a glossary, references for further readings and an index of diseases and disorders. Did you know that the potato is like the brain with an inner and outer medulla and a cortex? That it continues to respirate, suberize and convert starches to sugar in storage? NEW! $25.00

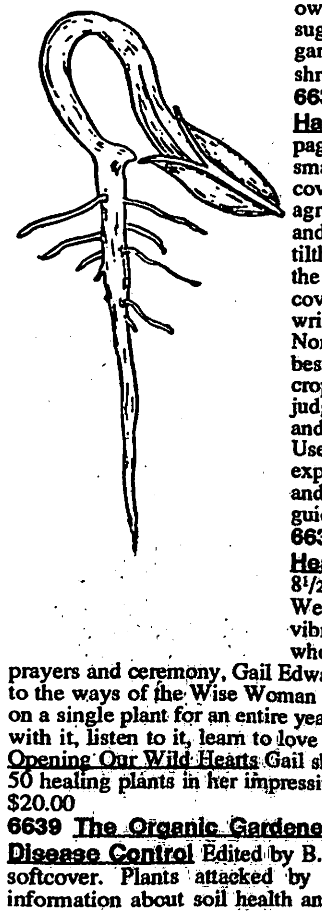
6615 Landscape Magic by Douglas Green, 144 pages, 8x11, softcover. "Oh no," I almost audibly sighed, "Not another glossy landscaping book," as I eyed the growing pile of rejects to gauge the trajectory of my expected toss. Which never came. It didn't despite the title and despite (or maybe, because of) the many striking pictures within. It didn't because this book is not about magic; it is about inspired craftsmanship, not the least of which is in the lucidity of the author, a practical man who knows how to make words work and, I'll bet, how to make gardens sing. Simple step-by-step instruction with clear illustrations adorn his work. I especially enjoyed the sections on pruning annuals, taking cuttings of perennials and the simple table of when and how to renovate more than 100 perennials. Includes chapters on roses, vines, flowering and evergreen shrubs, trees, small fruits and vines. As he quotes Goethe, "All theory, dear friend, is grey but the golden tree of actual life springs ever green." $20.00.

6618 Maine Alternative Yellow & Green Pages, published by INVERT, 248 pages, 7x8$^1/_2$, softcover. Anyone involved with social action or social service programs in Maine needs this extraordinary compilation of more than 1,200 grassroots organizations divided into 34 categories from "agriculture" to "women." Includes more than 125 socially and environmentally responsible businesses, Fedco among them, in its green pages section, a first-of-its-kind in Maine. A great place to find other people working for similar causes, or engaged in enterprises worthy of your hard-earned dollars. $8.00 NEW!

6619 The Male Herbal: Health Care for Men & Boys, by James Green, 278 pages, 6x9, softcover. A good male herbal, like a good man, is hard to find. Herbals by, and largely for, women abound; men have been more hesitant to embrace the recent renaissance. To his credit, Green asks why. Although not all his speculations are free from by-now stereotypical gender role pigeon-holing, enough are sufficiently profound to provoke the kind of deep thought we men need to nudge us away from some of our self-destructive tendencies. Green is refreshingly original, highly opinionated, and generous in sharing information not widely available to men, whether teaching us how to strengthen our hearts, how to reduce the negative impacts of stress in our lives, or how to reduce the vulnerability of the prostate, "our uniquely male chamber of silence where we store our most private concerns." One of Green's hypotheses is likely to change forever my way of evaluating lettuces. I have been downgrading bitter lettuces, but Green blames the avoidance of bitter flavors in Western diets for many sexual and immune system deficiencies. NEW! $14.00

6624 Native American Gardening: Stories Projects and Recipes for Families by Michael J. Caduto & Joseph Bruchac, 158 pages, 7x10, softcover. If you're of European descent you may be uneasy about your relationship to the Native peoples of our continent. Was life idyllically in balance with nature before Europeans colonized this land? Can we restore balance by learning to practice Native wisdom? Or does that amount to stealing and colonizing people's spirituality now that we've taken everything else? Native American Gardening answers the spirituality question outright. "Don't belittle sacred ceremonies and beliefs by trying to imitate them...Study Native ways as a lesson to be understood without being imitated...Learn more about your own spiritual tradition and how those beliefs support your being close to, and caring for, Earth and other people." This wonderful introduction to Native American gardening ways interweaves legends, instructions, recipes and history. Learn how to make rattles, jars and birdhouses from gourds, dolls from cornhusks, and traditional scarecrows. Learn how to use native seeds to plant a Three Sisters garden. Kokopilau, the humpbacked flute player of Hopi tradition, spreads seeds, music, culture and fertility wherever he travels. We can do the same by honoring the Circle of Life in our own gardens. Pitched at children, but full of remedial information for adults who grew up in the era when most schoolroom history instruction was nothing more than an apologia for "manifest destiny." NEW! $16.00

6626 The New Organic Grower, 2nd ed. by Eliot Coleman, 304 pages, 8x10, softcover. Although I could never be as organized, systematic, logical and disciplined, I've always admired Eliot Coleman, and his mentors Helen and Scott Nearing. Coleman crafted this classic out of his two decades of experimentation. A must if you are now, ever have been, or ever wish to be a market grower. The chapters on crop rotation and green manures alone are worth the price. This edition contains new chapters on low-cost tunnel construction, generating increased fertility in your soil, cutting-edge market-gardening ideas, and the commercialized winter garden. Coleman has revised the section on organic pest management to include new developments. $24.00

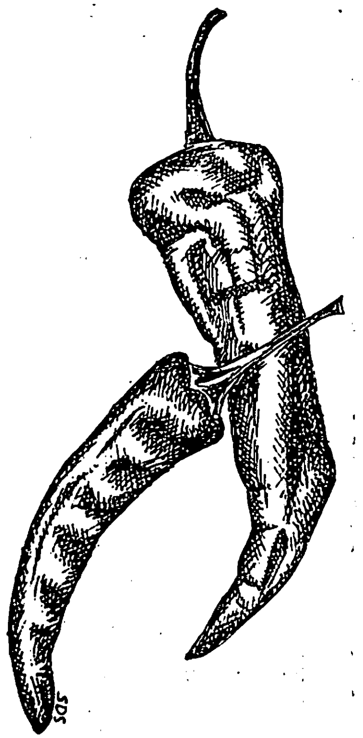


6632 The New Seed Starters Handbook by Nancy Bubel, 385 pages, 6¼x9, softcover. Revised edition of a gardening classic by a 30-year gardening veteran. If you start your own seeds indoors, you'll find many practical suggestions. Includes new sections on raising garden flowers, wildflowers, and trees and shrubs from seed. $16.00

6635 The Northeast Cover Crop Handbook by Marianne Sarrantonio, 118 pages, 8½x11, spiral-bound softcover. From small family gardens to large farms, covercropping is the keystone of sustainable agriculture. Cover crops restore depleted soils and maintain and improve soil fertility and tilth. The Northeast Cover Crop Handbook is the best source of information I have found on cover crops and their uses. This workbook, written for growing conditions in the Northeast, is designed to help farmers find the best crops to meet their needs. Learn which crop is optimal for which application, how to judge the effects of nitrogen from cover crops, and how to solve problems when they arise. Use the appendix to find planting information, expected yields of organic matter and nitrogen, and problems to watch out for. A most useful guide and resource. $15.00

6637 Opening Our Wild Hearts to the Healing Herbs by Gail Edwards, 294 pages, 8½x11, self-published spiral-bound softcover. We are blessed in Maine to enjoy such a vibrant community of herbalists, another of whom has now written a superb herbal. With prayers and ceremony, Gail Edwards invites us to open our hearts and senses to the ways of the Wise Woman Tradition. She advises each person to focus on a single plant for an entire year: Observe it through its seasonal cycles, sit with it, listen to it, learn to love it and it will become a teacher and ally. In Opening Our Wild Hearts Gail shares what she has learned about more than 50 healing plants in her impressive *materia medica* at the heart of her book. $20.00

6639 The Organic Gardener's Handbook of Natural Insect and Disease Control Edited by B. Ellis and F. Bradley, 534 pages, 7½x9¾, softcover. Plants attacked by diseases or insects can reveal valuable information about soil health and gardening techniques. Use this complete reference, including a 250-page alphabetical guide to identification and solution of plant problems, 80 pages of full-color insect photos, and 140 pages on plant diseases and modern control strategies, to help you identify and successfully treat disease and insect problems in gardens, woods, orchards and flower beds. $17.50.



6644 Peppers of the World: an Identification Guide by Dave DeWitt and Paul W. Bosland, 219 pages, 6x9, softcover. If you like it hot, or if peppers ring your bell, or if you want to take the bull by the horns (Red Corno de Toro from Italy), here's a piece of heaven in which to hunt amongst mouth-watering beautiful color photographs for *capsicum* treasures. Will your fatale be the Fatalii, a yellow pointy pungent pepper from Central African Republic? Or will you embrace the Viejo Arruga Dulce from Mexico (the name means wrinkled sweet old man)? Do you prefer the iterative Pili-Pili from Ethiopia (means 'pepper-pepper' in Swahili), the melodious Chile Inayague from Mexico or the rhythmic pencil-shaped Yatsafusa from Japan? Or would you rather stay in the States with NuMex Big Jim, a mildly hot pod pepper that has earned a place in the Guiness Book of Records as the largest (up to 12") pepper? In their smorgasbord of shapes, colors, sweetness, pungency and geographic distribution peppers rival tomatoes. See if you can pick out which ones Fedco will introduce in 1999. NEW! $19.50

6645 The Perfect Pumpkin: Growing • Cooking • Carving by Gail Damerow, 219 pages, 6x9, softcover. Our new staffer Cheryl Gariepy says the world needs more books about pumpkins. Pumpkins are fun and, as natives to North America, may be the true All-American vegetable. Technically, they are not vegetables at all but fruits, berries at that, actually the only berries with a hard outer shell. Grow them for delicious pies or roasted seeds, for carving or for magnificent shapes and sizes, for kids or for bragging rights. Pumpkin growing contests have gone big time recently with the world record now surpassing a half ton. Damerow introduces you to more than 90 varieties from the diminutive white Baby Boo to the enormous Dill's Atlantic Giant, the one serious half-ton aspirants insist upon. She shows you how to outwit pumpkin pests, how to carve the fruits, how to make pumpkin leather, pumpkin soup and even pumpkin ale. Whatever draws you to pumpkins, you are likely to find at least several varieties with the right stuff. NEW! $13.00

6646 Pictorial Guide to Perennials, revised edition, by M. Jane Coleman Helmer and Karla S. Decker Hodge, 128 pages, 8x10¼, softcover. If, like me, you have just begun delving into the fascinating field of perennials, you need a book with lavish detailed pictures. Pictorial Guide delivers more than 300 of them, along with basic descriptive information, propagation methods and hardiness. Now I have the perfect reference when a customer suggests an additional perennial for our catalog, or when I just want to ponder what I'm going to put into those new beds. If you've been longing to learn about perennials, but have been daunted by all the choices, here's your starting point. $14.00

6648 The Potato Field Manual Edited by A. Ulrich, G. Kleinschmidt and L. Sandvol, 72 pages, 3½x7, softcover. A handy little manual loaded with color photos. Covers nutrient deficiencies, a variety of diseases (virus, bacteria, nematodes, etc.), physiological disorders, chemical injuries and insect damage. A must for the serious potato farmer. $5.00.

6650 The Real Dirt ed. by Miranda Smith and members of NOFA and Cooperative Extension, 264 pages, 8½x11, softcover. Here is a snapshot of best organic management practices in the early 1990s. The authors and editors devoted nearly five years to research, compile, write, review, condense and weave an immense amount of material into The Real Dirt's anecdotal praxis. Here you will meet many of the leading practitioners of organic agriculture in the Northeast–some like Eero Ruutilla, Elizabeth Henderson, Julie Rawson and Jack Kittredge longtime Fedco customers–who offer hands-on courses in soil management, rotations, composting, pest and weed management, greenhouse production, marketing and much more. $14.00

6651 Rebirth of the Small Family Farm by Bob and Bonnie Gregson, 64 pages, 8½x11, softcover. This is the book for small farmer wannabees. Without benefit of previous farming experience, the Gregsons made the transition in their mid-40s from the corporate management world to a small family CSA farm on an island off the coast of Washington. Eight years later, having achieved success after several false starts and failures, they were ready to tell their story. Tell they do, in a simple accessible practical manual rich with details of farm economics. This convincing case study argues that others willing to follow ten basic principles can replicate the Gregsons' success. Appendix includes the CSA share each subscriber received from them in 1995. $8.50

6654 The Rodale Book of Composting edited by D. L. Martin and G. Gershuny, 278 pages, 6½x9¼, softcover. Most compost books are either too technical or too simple to be useful, but this one falls nicely in the middle. Its technical side informs but does not overwhelm. Its simple instructions and charts guide first-time composters. Covers composting techniques useful for backyard gardeners and large-scale farmers, tips on indoor composting, earthworms, compost bins, soil amendments and much more. $14.50.

6656 Root Cellaring, 2nd ed., by Mike and Nancy Bubel, 297 pages, 6x9, softcover. According to the Bubels, a good root cellar provides a "direct, earthy and deeply satisfying connection between our summer efforts in the garden and our winter need for fresh wholesome food." If thoughts of crisp carrots in March set your mouth watering, let the Bubels take you on a well-illustrated tour of root cellar designs. They can also help with varietal selection, optimal storage conditions, and even recipes. $14.00

6660 The Roots of Healing: A Woman's Book of Herbs by Deb Soule, illustrated by Susan Szwed, 256 pages, 6x9, softcover. Our relationship with the fairies at Avena Botanicals Herbal Apothecary, first kindled by the close proximity of our booths at Common Ground Fair, has grown closer each year. We long awaited the publication of Deb's first book, and you purchased over 500 copies in the last three years. If ever words could match the sheer artistry and joy of her extraordinary Avena gardens, Deb's lyrical passages come close, singing with the wholeness of her calling. Whether you seek simple, clear directions for making tinctures, decoctions, flower essences, salves and other remedies, the historical perspective to appreciate the healing tradition of witchcraft, or the inspiration to help find your own healing path, Deb guides the way. Fearlessly she breaks new trails, exploring a variety of women's concerns, offering support for women recovering from sexual abuse, and information on lesbian health issues never before addressed in an herbal. A wise woman in the best sense of the tradition, Deb has combined her 20 years of experience in growing, gathering, preparing and using herbs with her exceptional teaching skills and her profound affirmations to produce an enduring work of depth and vision. Illustrator Sue Szwed's work has graced our catalog for a number of years. $13.00

From The Roots of Healing by Deb Soule.

6665 The Scythe Book by David Tresemer, 128 pages, 5½x8½, softcover. In this information age, knowledge is disappearing. As power replaces intelligence, and "efficiency" substitutes for sound practice, the commonplace skills of yore are becoming uncommon and harder to learn. In The Scythe Book David Tresemer seeks to reverse that trend, offering not merely an instruction manual for the use of a tool (how to stand, how to mow, how to sharpen and care for your scythe), but an argument for the superiority of the scythe over mechanical mowing for small farmers and growers. Tresemer has done a lot of research into the history of the scythe and its usefulness and makes his case entertainingly and convincingly. Anyone who owns a scythe should read this book and anyone who reads it will want to use one. $14.50

6672 Seed to Seed by Suzanne Ashworth, 240 pages, 8½x11, softcover. Now considered the classic reference in the field with detailed instructions on seed saving techniques, including harvesting, drying, cleaning and storage, and proper isolation distances to maintain purity. Spectacular photographs by David Cavagnaro, many taken at the Seed Savers Exchange's lovely gardens at Heritage Farm, enhance Ashworth's text. This is the book our own seed growers use. $20.00

6680 Sex in Your Garden by Angela Overy, 120 pages, 9x9, softcover. Although a vowel away from being a perfect pun, even the author's name sets the proper tone of hilarity. Botany in school was never taught like this! Because they are rooted in the ground, plants need to attract pollinating intermediaries to complete the act. Ovary unabashedly compares plant and human strategies for achieving sexual consummation. We turn out to have a lot in common! Some plants, such as the dandelion, are promiscuous—fertilized by a multitude of insects. Others like monkshood are faithful and devoted, admitting only bumblebees. Some are gaudy and extroverted, others subdued and introverted. Both people and plants exploit the advantages of semiconcealed sexual parts. Both use hair to attract and repel. Plants offer bribes like nectar, pollen and shelter, humans offer bribes like, well, never mind! Plants even have their criminal elements like venus's flytraps who murder their pollinating guests. Overy's stunning color photographs will stimulate the prurient interest of all gardeners. I expect a few Madison Avenue types will also draw inspiration for their next advertising campaigns. NEW! $19.50

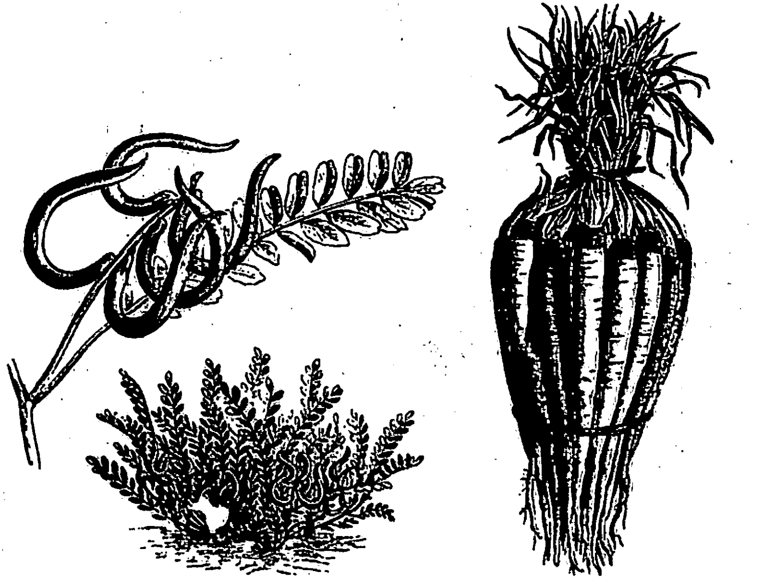
6684 Shepherd's Purse: Organic Pest Control Handbook by PEST Publications, 52 pages, 5½x8½ softcover. A good handbook for home gardeners, with large color drawings of common insect pests, summaries of their life cycles, and available organic controls. Has a handy index of suppliers of beneficial insects, "organic" and microbial products. Reduced for clearance. $8.00

6686 The Sourcebook for Sustainable Agriculture by the Sustainable Agriculture Network, 8½x11, softcover. Where do you find other folks like you, who are committed to a sustainable agriculture and a liveable future? They're here, in this guide to the people, organizations and companies involved in sustainable agriculture, and their publications and newsletters. An expanded version of the The Showcase of Sustainable Agriculture with a third more entries and an improved layout which provides a roadmap for the agricultural information highway. As Bill Clinton would say: "A bridge to the future." $12.00

6690 Stella★Natura: Planting Calendar for Moon, Sun and Zodiac published by The Bio-Dynamic Farming and Gardening Assn., 40 pages, 9x12 unopened. The theme for 1998 is "What is the Role of the Human Being on Earth?" the articles address such profound topics as: Deep ecology, the craft of compost, biodynamics, and what is the task of agriculture? Includes profiles on St. Francis, John Frederick Oberlin, and John A. Chapman (Johnny Appleseed). Also contains lunar and astronomical charts correlated with planting data, which many of our customers find valuable. "Down-to-earth advice for gardening with cosmic rhythms." Rudolf Steiner, founder of biodynamics, once said that "you can reckon with the effects of the stars without being the least bit superstitious." Formerly entitled The Kimberton Hills Agricultural Calendar. $11.00

6692 Taylor's Guide to Heirloom Vegetables by Benjamin Watson, 343 pages, 4¼x8½, clothbound. You've probably grown accustomed to seeing glossy color photographs of toothsome hybrids. But I'll bet you've never seen gorgeous close-ups of Moon and Stars watermelon, Black Krim tomato, Jenny Lind muskmelon, Cavolo Palmizio kale or Speckled lettuce. This guide fills that gap and serves as a great introduction to over 500 heirloom varieties. It proved an invaluable research tool for this year's catalog. Although I quibbled with a few of the omissions (Golden Gopher muskmelon, Ruby Gold and Aunt Ruby's tomatoes, Cracoviensis lettuce all come to mind) I found the descriptions fascinating and the photographs sublime. I'll be revisiting this volume frequently to select heirlooms for our trials. NEW! $22.00

6695 The Vegetable Garden by MM. Vilmorin-Andrieux, 620 pages, 6x8¾, softcover. Martha Gottlieb, who coordinates the Exhibition Hall at Common Ground Fair, first brought my attention to this treasure trove. Written in 1885 by two master seedsmen (their company in France is still one of our major suppliers), it is a bible for heirloom enthusiasts researching varieties. Find long-lost peas such as Daniel O'Rourke and Marly, tomatoes such as Trophy and Powell's Early as well as oldies which have come back into prominence such as the Red Currant Tomato. Will the long-forgotten root vegetable skirret (for which we are seeking a seed source) or asparagus lettuce (of which our Cracoviensis #2816 is a form) come back prominently into commerce? Take advantage of our reduced price. $18.00



From The Vegetable Garden by MM. Vilmorin-Andrieux.

DISCOUNTED SPECIALS

The descriptions explain our reasons for carrying and then dropping these cultivars. We know you love bargains and we hate to disappoint you. We run out of most discounted specials during our February rush. Please order early.

6802 Black Kabouli Bush Garbanzo (115 days) *Cicer arietinum* A cool-weather crop cultured like peas, Black Kabouli was developed at Washington State University and is tolerant of cold soils and light frosts. Its 2' plants bear abundant two-seeded pods resembling beach peas with black medium-sized beans within. Don't be scared off by its lengthy maturation requirements; plant earlier than other beans. Discounted because crop failure this year. Limited supply carried over from previous year. 80% germination. A=1/2oz, 50¢, ~45 seeds.

6804 Golden Butterwax (56 days) *Phaseolus vulgaris* White-seeded wax bean with rich yellow color and straight pods. Less juicy, more meaty than Golden Rocky. Replaced by Buttercrisp, a superior variety. Resistant to CBMV, NY 15, tolerant to ozone damage. B=2oz, 70¢, ~150 seeds, C=1/2lb, $2.20.

6808 Seneca Horizon Sweet Corn (71 days) *Zea mays* Yellow hybrid from Robson has good eating for an early corn, but is not as tender as our replacement, **#508 Spring Treat.** We have only 12# left with 89% germination. Order early, won't last long. B=2oz, 70¢, ~245 seeds, C=1/2lb, $2.20.

6810 Kandy King Sweet Corn (79 days) *Z. m.* Its magnificent yellow 8" ears pack superb flavor that is sweet as its name. Good cool-soil emergence. Sugary-enhanced hybrid holds well in the field. Replaced by Kandy Plus which was similar but even a little better in the trials. 85% germination. B=2oz, 70¢, ~235 seeds, C=1/2lb, $2.20.

6812 Kiss 'n Tell Sweet Corn (81 days) *Z. m.* You will want to include this sugary enhanced bicolor hybrid in your program despite its ridiculous name! Ripening just before midseason, its 7" ears with dark green husks hold their quality over a long picking period. Boasts attractive small kernels of rich sweetness with superb taste comparable to Sugar Buns. 90% germination. ~435 seeds, B=2oz, 70¢, ~435 seeds, C=1/2lb, $2.20.

6820 Early Chaca Charantais Melon (72 days) *Cucumis melo* Petoseed has discontinued production of this French melon so perfectly suited for cold climates that it is a cinch to grow even in the frost pockets in Maine. This is your last chance to order from our 100 remaining packets. Order early, they won't last long. If you snooze, you lose. 92% germination. A=1g, 50¢, ~40 seeds.

6822 Fastbreak Muskmelon (86 days) *C. m.* We are discontinuing Fastbreak because it has yet to make that first crucial outlet pass in sales, and the pressure is closing in. Our melon trialer has taken me to task for damning Fastbreak with sports analogies and faint praise. She says it ripens much earlier than Pulsar so I haven't even given it a fair shake in maturity ratings. Maybe you'd like to try its rough-netted slightly ribbed sweet musky 4 lb. fruits for yourself. If enough of you do, we'll bring it back. If not, it'll be just another turnover! 90% germination. Tolerant to F2 and PM1. A=1g, 50¢, ~29 seeds.

6826 Kidma Middle Eastern Cucumber (59 days) *Cucumis sativus* F-1 hybrid. We're still looking for the ideal replacement for our very popular Hylares. Kidma's glossy green smooth-skinned fruits are crisper, more uniform and much more prolific than Hylares but lack the refreshing taste we crave. Order early, we have only 42 packet left at 80% germination. A=1g, 50¢.

6828 Suhyo Long Cucumber (61 days) *C. s.* Open-pollinated oriental cucumber grows up to 15" long with a curly shape. More uniform if trellised. These cukes are sweet with a mild burpless flavor. We discounted it because only treated seed is available this year. We hope to have a new crop of untreated seed for 1999. 83% germination. A=1/16oz, 50¢, ~50 seeds.

6832 Cucuzzi Gourd (65 days) *Lagenaria siceraria* We are discontinuing for lack of demand. Perhaps their vining habit is too rampant for most gardeners. When the fruits are still narrow and 8-16" long, they are decent zucchini substitutes with a stronger flavor. Left unpicked the fruits will grow up to 4' with curves on each end so they literally can be worn across your shoulders or used for a swing or two in the old ball game. A=1/8oz, 50¢, ~40 seeds.

6836 American Purple Top Rutabaga (95 days) *Brassica napus* Replaced by Laurentian, a similar but superior variety. 80% germination. A=1/8oz, 50¢, ~875 seeds.

6840 Early Yellow Globe Onion (100 days) *Allium cepa* Medium-hard yellow onion can be stored till midwinter. We've replaced it with a superior strain that makes harder bulbs. (see **#2450 New York Early**) Nine-tenths of a pound remains at 75% germination. A=1/16oz, 50¢.

6842 Southport White Globe (100 days) *A. c.* We have discontinued this variety due to lack of demand. Globular medium-sized bulbs with delicate snowy scales keep through first part of winter. 90% germination. A=1/16oz, 50¢, ~350 seeds.

6846 Winter Bloomsdale Spinach (42 days) *Spinacia oleracea* Discontinued because we can no longer find a supplier. Dark-green savoyed variety recommended for early spring and fall plantings because of tolerance to cold temperatures. Resistant to CMV and blue mold. 85% germination. A=1/4oz, 50¢.

6850 Augusto Radicchio (70 days) *Cichorium intybus* F-1 hybrid. Best to plant in midsummer for large heads in September. We've discontinued because **#2662 Palla Di Fuoco Rossa** outperformed it in our 1997 trial. 85% germination. A=1/2g, 50¢.

6852 Slobolt Lettuce (53 days) *Lactuca sativa* Slow growth in its early stages is the key to Slobolt's success as a summer lettuce. A Grand Rapids type with much paler green leaves than Waldmann's, Slobolt will hold well into July without bolting. Slow sales in the past few years is the key to Slobolt's relegation to the discontinued section. **#2824 Simpson Elite** is a good substitute. 88% germination. A=1g, 50¢.

6855 Nancy Butterhead Lettuce (58 days) *L. s.* Nancy is indeed an elegant Butterhead which makes extra-large very tight tasty heads. But its price to us has almost doubled in the last two years. Amazingly, we found an even better butterhead in our trials, **#2932 Esmeralda**, that comes to us for less than 1/16 the price of Nancy! 95% germination. A=1g, 50¢.

6858 Malabar Red (40 days) *Basella rubra* Also called Malabar Spinach. Tastes just a little stronger than spinach, with thicker, more mucilaginous leaves. Unlike spinach, survives summer heat, likes warm, moist conditions. Has not been as vigorous a grower as we expected. We have around 100 packets. A=1/16oz, 50¢.

6860 Kailaan (65 days) *Brassica oleracea* (alboglabra group) Also known as Gai Lown. Prized for its mild green leaves and sweet, juicy stem, the former often sautéed or added to soups, the latter enjoyed in salads or stir fries. Sales were slow, most customers prefer its replacement **#3396 Raab.** Almost 2.5# on hand, call for bulk quote. 90% germination. A=1/16oz, 50¢.

6862 Green Boy Pepper (82 days) *Capsicum annuum* From Agway. Blocky 3-4 lobed fruits once received the highest rating in the University of Maine bell pepper evaluations. Discontinued because sales have been slow. 74% germination. A=.2g, 50¢.

6868 Black Prince Tomato (75 days) *L. e.* Ind. With the greatest reluctance, we are discontinuing Prince. I can see why Amy LeBlanc calls this "delightful full-flavored dark brown slicer" "divine." But we sold only 42 packets last year. Prince is too similar to Black Krim, its smooth round fruits much smaller (5-7 oz.) but with far fewer blemishes. Its flavor falls just a bit short of the complex richness of Krim, but unlike Krim, its appealing appearance allows it to be marketed. From Irkutsk, Siberia. 75% germination. A=.2g, 50¢, ~65 seeds.

6870 Moira Tomato (76 days) *L. e.* Det. Main crop bush beefsteak type for the North. Fruits uniform about 6 oz. with deep red color. Has far fewer defects than other open-pollinated determinate types but its flavor cannot compare with the tastier heirlooms. 75% germination. A=.2g, 50¢, ~65 seeds.

6872 White Potato Leaf Tomato (85 days) *L. e.* Ind. A wonderful example of tomato diversity, these large yellow-white fruits have a tart, almost vinegary, zip. Comments at our trial: "Almost like eating a lemon." "Put these in your salad and you won't need the dressing." Guess we were a little out there with this selection: Only 134 of you were sufficiently adventurous to try it in two years. 78% germination. A=.2g, 50¢, ~65 seeds.

6874 Jackpot Tomato (71 days) *L. e.* Det. We are discontinuing because sales have been consistently dropping for this midseason hybrid. For better flavor we recommend **#4260 Big Beef** or **#4268 Celebrity.** A=.2g, 50¢, ~65 seeds.

6880 Spotted Monkey Flower *Mimulus* x *hybridus* 'Grandiflorus' Like pansies, the yellow and orange blooms are freckled with browns, giving them an irreverent monkey-face effect. Start indoors in April (do not cover the seed) and transplant in 4 weeks. Likes cool weather, but doesn't tolerate frost. Likes partial shade and moist locations, dislikes drought. Discontinued because too few of you were willing to monkey with it. 86% germination. A=.1g, 50¢, ~2,500 seeds. 700,000 seeds/oz.

6884 Super Friendship Mix Painted Tongue *Salpiglossis sinuata* Delicate trumpet-shaped blooms with exquisite veins and markings, in dark blue, purple, deep red, strawberry, light and deep pinks, yellow, sky blue and cream, with gold and white veining. Not much foliage, so flowers really stand out. Deadhead to keep production up. For earlier blooms start indoors 8 weeks before setting out after danger of frost. Thrives in cool summers with full sun. Discounted due to crop failure. We hope to have it back next year. Germination 80%. A=.2g, 50¢, ~860 seeds. 125,000 seeds/oz.

6888 Lamb's Ear *Stachys byzantina* Also known as Wooly Betony. 1' perennial with soft fuzzy leaves and purple flowers has a silvery appearance. Needs light to germinate. Discontinued because of slow sales. 65% germination. Zones 4-8. A=.2g, 50¢, ~110 seeds. 16,000 seeds/oz.

6890 Large Brome Grass *Bromus lanceolatus* Also known as Mediterranean Brome. Outstanding quality for dried flower arrangements. Tedious to harvest, but its texture is so nice in wreaths, bouquets and arrangements that it is worth the effort. Requires early sowing and a good growing season for a successful harvest. It turns from purple to greenish-tan as it matures, and becomes more segmented, affording different looks at different stages. Discontinued because of slow sales. 75% germination. A=.5g, 50¢, ~125 seeds. 7,000 seeds/oz.

MOOSE TUBERS

Certified Seed Potatoes, Onion Sets, Sunchokes & Sweet Potatoes

Welcome to our 12th listing of high-quality certified seed potatoes. We also offer Holland-grown onion sets, Maine-grown sunchokes, and Massachusetts-grown sweet potato slips. Our commercially and organically grown potatoes include old-time favorites, standard and uncommon varieties—all selected for flavor, yield, storage, disease resistance, marketability and interest.

While we try to carry your favorites, we vary our selection each year to introduce interesting new varieties and to reacquaint you with some good old ones that might otherwise be forgotten. If you would like a variety we don't list, we may be able to get it for you in 50 lb. quantities. Please ask.

All our potatoes meet the certification standards set by the grower's state or province. The plants have passed several field inspections and sample potatoes are grown out in Florida and examined for the presence of disease. Only lots where fewer than 5% of the plants show any sign of disease are certified.

Our potatoes come from many sources: well-established commercial growers in Aroostook county and New Brunswick, Colorado, New York, and MOFGA-certified organic farms including WoodPrairie Farm. Jim and Megan Gerritsen of WoodPrairie Farm are well-known for the quality of their products and for their leadership in the organic community. We are proud to offer their varieties.

Always working to expand our selection of organic seed potatoes, we are seeking certified organic growers with access to good storage willing to work with their state's certified seed program. Want to get involved in potato selection? Join our network of trial growers. Call me at (207) 873-7333 or write to PO Box 520, Waterville ME 04903.

Alison LaCourse, potato coordinator

New for 1998!

- Sweet Potato slips - Four yummy varieties for Northern gardens.
- Kipfel Fingerling - large golden crescents.
- New selections in the Collections -
  - * Specialty Organics now includes Kerr's Pink *
  - * Fantastic Fingerlings now has Kipfel and Peanut *
- Organic varieties -
  - * Red Gold * Huckleberry * Reddale*
  - * Blossom * Island Sunshine *
- Early Blue - a gorgeous blue with white eyes and white flesh.
- Eramosa - early white, 65 days with scab resistance.
- Chippewa - mid to early white, smooth and clean.
- Quaggy Joe - bred in Maine, mid-late white.
- W-1005-R - high-yielding russet, excellent baker.

Substitutions

Because potatoes are alive and subject to crop limitations, we'll always run out of some varieties before the end of the season. We find that most people prefer getting potatoes to a refund. Unless you indicate on your order sheet that you will not accept subtitutions, we'll follow this protocol:

For commercial varieties -

We will substitute a variety of similar color and season.

For organic varieties -

We will substitute the same variety, grown without synthetic insecticides, fertilizers, herbicides or fungicides, but not *certified* organic.

If that's not available, we'll substitute certified organic stock of a similar variety.

If neither of those is available, we will substitute commercial stock of the same variety and refund the price difference.

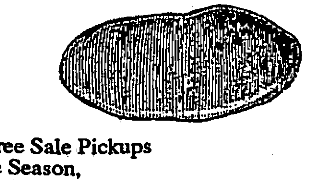
If you have specific preferences, please indicate them on your order sheet.

How To Order

All orders must be on one of our 1998 Moose Tubers order forms. An order blank is in the center of the catalog on page 42E. If you need another copy or would like a grid order form, call us and we'll be happy to send it to you.

We've changed our **small order handling charge**; you may now **combine orders to calculate it.** Fill out all your Fedco order forms and send them in one envelope. If the combined total is over $50, pay no handling charge. If your total is less than $50, please enclose one $3 handling charge.

Payment with check, money order or credit card must accompany all orders. We request that all orders under $25 pay with a check or MO. Make your check out to Fedco, and send it with the order form(s) to **PO Box 520, Waterville, ME 04903-0520.** We now accept Visa and MasterCard. We will bill your credit card when we receive your order. We will bill or refund you for any adjustments as each order is completed. We cannot charge the adjustments to your credit card. If you pay with a credit card, you may fax your completed order form to (207) 873-7333. **Sorry, we do not take phone orders.**



Deadlines

Orders received by:	qualify for:
Feb 13	Volume discounts
Feb 27	Best Selection
March 20	Moose Tubers & Tree Sale Pickups
April 24	Final Orders for the Season, potato supply limited

Volume Discounts

We reward timely orders over $100 with discounts to encourage you to order as part of a group and to help us determine how much we need to purchase. Figure your discount from your order total before shipping. To qualify for a volume discount we must receive your order by February 13.

Orders over $100 deduct 5%
Orders over $200 deduct 10%
Orders over $400 deduct 15%
Orders over 2500 lbs. potatoes, call for quote.

Shipping

Potato prices do not include shipping. The shipping weight is the same as the product weight.

To determine your shipping charges look up your zip code in the chart below to figure your shipping cost.

Orders to *Alaska* and *Hawaii* are shipped priority mail. To figure your shipping charges please add 30% of your order total to the shipping line.

Delivery options

On your order form please indicate how you want to receive your order. We ship via UPS (or common carrier for large orders) or you can pick up your order at our warehouse in Clinton.

UPS We begin shipping in mid April, and ship in the order received. If you need your potatoes early, please order early! We ship sweet potato slips separately in late May.

Common Carrier If your shipment weighs more than 500# call us with the estimated weight and the destination zip code. We will check with trucking companies in Maine and quote you a price based on their rates. In some instances UPS will be cheaper.

PICKUP Our warehouse is easy to find, less than a mile from I-95, exit 37. We send a postcard map and reminder to those planning to come. We must receive your order by March 20.

Moose Tubers pickup Thursday and Friday, April 9-10, 9am-4:30pm, Saturday, April 11, 9am-noon.

Tree Sale pickup Friday, Saturday and Sunday, May 1-3, 9am-3:00pm; any remaining stock will be on clearance sale May 1-3.

Parcel Post We cannot recommend parcel post for shipping potatoes. It takes too long and the spuds can be damaged by either heat or cold. If UPS can't find your house, please have them delivered to your workplace or a neighbor. Thanks.

If your order weighs ☛ And your zip code begins with	1/2 to 5 lbs.	up to 10 lbs.	up to 15 lbs.	up to 20 lbs.	up to 25 lbs.	up to 30 lbs.	up to 35 lbs.	up to 40 lbs.	up to 45 lbs.	over 45 lbs.	over 250 lbs.	over 500 lbs.
030-059	$4.00	$4.75	$5.25	$5.75	$6.35	$7.00	$7.50	$8.25	$8.75	.18/lb.	.13/lb.	call for a quote 207-873-7333
010-029, 060-069, 119-136	$4.25	$5.00	$5.50	$6.50	$7.30	$8.25	$9.00	$10.00	$10.75	.23/lb.	.15/lb.	
070-089, 100-116, 137-227	$4.80	$5.25	$5.80	$6.90	$8.10	$9.25	$10.25	$11.30	$12.50	.27/lb.	.18/lb.	
228-475	$5.05	$5.65	$6.90	$8.00	$9.50	$10.90	$12.25	$13.75	$15.20	.33/lb.	.21/lb.	
476-574	$5.45	$6.35	$7.95	$9.80	$11.75	$13.60	$15.50	$17.35	$18.90	.41/lb.	.25/lb.	
others except AK and HI	$6.35	$8.00	$10.65	$13.55	$16.50	$19.10	$22.50	$24.75	$27.30	.60/lb.	.32/lb.	

Orders to AK and HI are sent Priority Mail. Add 30% of your order total for postage.

GROWING POTATOES

Upon Arrival

Inspect your order on arrival. If you do not plant within two weeks, store seed in a dark cool (around 40°) fairly humid place. Do not remove growing sprouts; these are your new plants. Warm the seed to 60-70° for two weeks before planting.

Cutting Seed

Small tubers planted whole are less sensitive to seed piece decay than cut pieces. You can cut large tubers into pieces of two ounces or more with at least two eyes. Many varieties have eyes clustered at one end, so be sure to distribute eyes evenly when cutting. Fingerling eyes spiral the length of the tuber so they may be cut into discs or wedges. Letting the tubers skin over (suberize) for a day or two can be valuable in heavy soils, but cutting and planting can be one operation.

Chitting or Green Sprouting

Chitting is used to encourage early growth, speed development of marketable tubers, and may contribute to heavier yields. Warm tubers to 65° in the dark for about two weeks, then spread them out with most of the eyes facing up in a warm place (60-70°) with medium light intensity for about two weeks. This stimulates strong stubby sprouts at the bud end that are not easily broken off.

Soil Preparation

Potatoes grow in any well-drained, fertile soil. Work in compost or aged manure. Using uncomposted manure, lime or wood ash the year of planting will increase the incidence of scab. Turn new ground the year before and plant with a rye/vetch cover crop. Rotate potatoes (and other Solanaceae family members: tomatoes, peppers, and eggplants) with other plant families in at least a 3-year, and preferably a 4-year rotation.

Planting

Plant when the soil is dry enough to work easily and has warmed to at least 45°, about when dandelions bloom. Planting in cooler soil slows emergence and increases the chance of seed piece decay. Plant in furrows 4-6" deep, in rows 32-36" apart. Space seed pieces 8-12" apart and cover with 2-4" of soil. One pound of seed will usually plant 5-8 row feet and 20 pounds will usually plant 100 row feet. Using 2 oz. seed pieces 12" apart with 36" row spacing, you need approximately 1800 lbs. (or 900 lbs. fingerlings) per acre.

Cultivation and Hilling

Cultivate shallowly as needed during early growth. Hill when plants reach 6" and again at 12-15". After the second hilling, plants will shade and outcompete weeds. Don't cover plants completely when hilling. Be gentle so as not to damage the roots. Hilling gives the plants room to develop potatoes between the seed piece and the soil surface. Mulch plants after the second hilling to help retain soil moisture, control weeds and reduce incidence of sunburn.

Irrigation

Potato plants are sensitive to small changes in soil moisture because of their shallow (12-15") root systems. Tuber yield and size are directly related to the amount of water available during two critical growth stages: tuber initiation and tuber bulking. Tuber initiation is a 10-14 day period when tubers form at stolon tips. For most varieties, the end of this stage coincides with early flowering. Tuber bulking follows and continues until plants are mature. Lack of water tends to increase incidence and severity of scab, and will affect yield and overall size of the potatoes. Inconsistent water may cause growth cracks, hollow heart and second growth. Ensure 1" of water weekly from plant emergence until two weeks before harvest.

Harvest and Storage

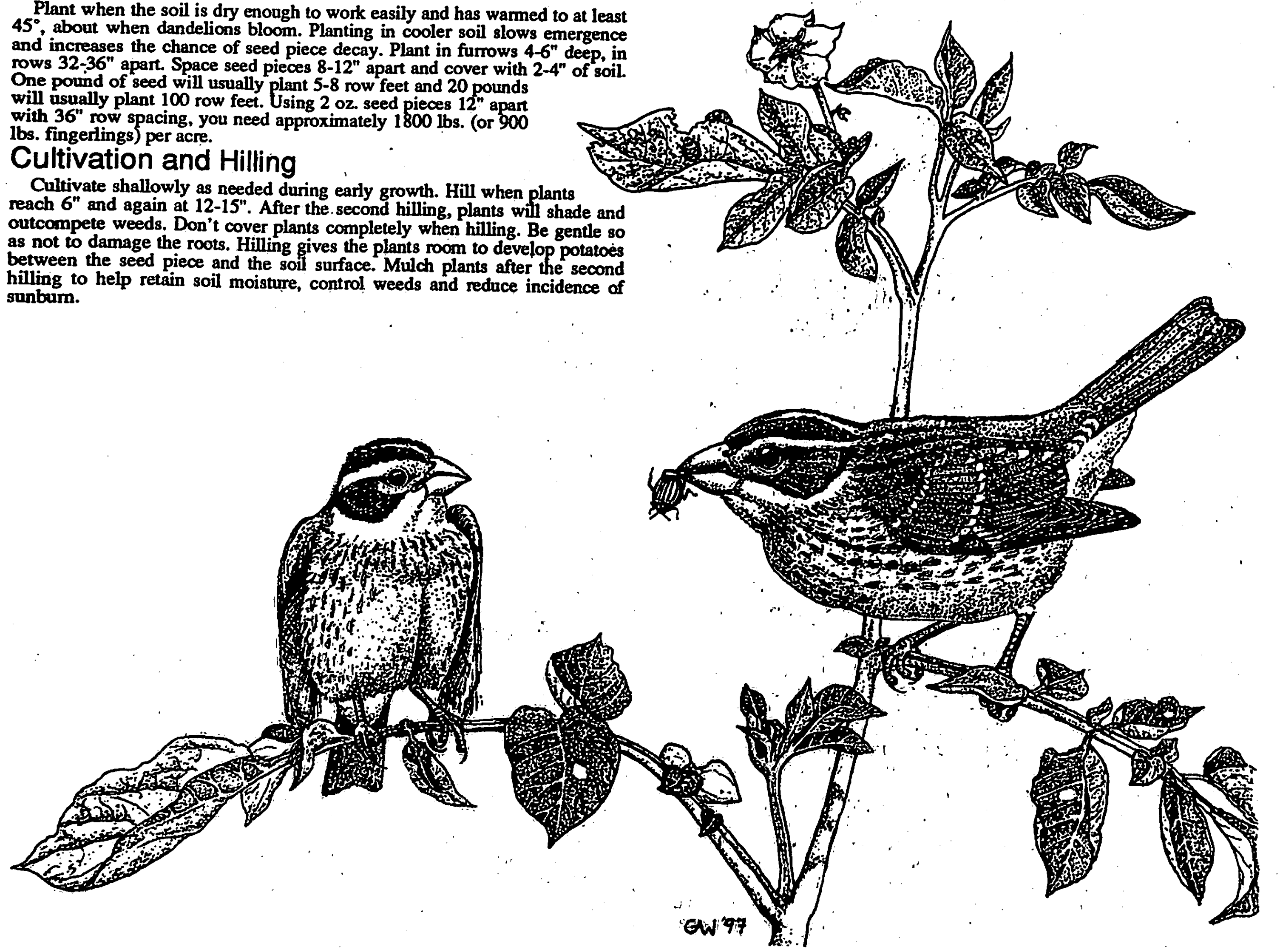
If vines haven't died back, pull, cut or mow them 10-14 days before harvest to give the skin time to "set," and to prevent transmission of blight spores from foliage to tubers. Harvest in cool dry weather if possible. After digging the spuds, dry them for at least a few hours in the row before gathering. Don't wash potatoes intended for storage. Hold at 55-60° for several weeks to allow harvest injuries and bruising to heal; then store only sound tubers at 38-40° with 85-90% relative humidity in complete darkness.

Yields

An average yield is 10 pounds harvested to 1 pound planted (10:1). Less than 6:1 indicates that something may be wrong. Low fertility, lack of water and excessive disease or insect pressure are likely causes. Yields as high as 20:1 are exceptional, but can be achieved. Fingerlings have very high yield potential and can surpass 30:1 with good care. Commercial operations in Maine average around 230 hundredweight per acre.

Spud Pests

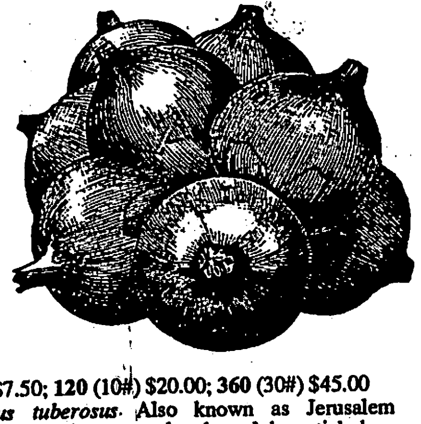
See The Potato Field Manual #6648 and IPM for Potatoes #6612 in the book section for further information. For information on leafhoppers and late blight, see pages 66 and 68.



ONIONS & SUNCHOKES

7005 Stuttgarter Sets *Allium cepa* Top-quality onion sets from Holland which produce excellently flavored flat-bottomed keepers. Plant as early as possible in the spring. Onions are heavy feeders and need highly fertile soil or composted manure to produce large bulbs. Provide consistent water throughout the season and keep them free of weeds. In row culture, plant 6" apart in rows 18" apart and mulch when plants are 12-18" tall. In bed culture, plant 5-6" apart in 24-36" wide bed. 1# contains approximately 200 sets and can yield 40-50#.
1# $2.75; 3# $7.50; 10# $18.00; 30# $42.00

7010 Dutch Shallots *A. c.* (aggregatum group) Beautiful vigorous plant with its many onion-like leaves growing in a circle around the original set, also called Multiplier Onions. Good as green onions (scallions) for spring and early summer use. For consistently large mature shallots, maintain high fertility and a steady supply of water; small shallots are no fun to cut and prepare for cooking. Excellent storage makes shallots valuable in late winter after onions are gone. Taste is similar to onions. Different from French shallots, which Fedco Bulbs offers in the fall. Plant 6-8" apart in rows 18" apart. (Approximate weight, for calculating shipping, in parentheses.)
12 shallots (1#) $2.75; 36 (3#) $7.50; 120 (10#) $20.00; 360 (30#) $45.00



7015 Sunchokes *Helianthus tuberosus* Also known as Jerusalem Artichokes, though neither from Jerusalem nor related to globe artichokes. Sunchokes are wonderfully vigorous perennial tubers that are a delight to dig in the spring. They can be eaten boiled, baked or fresh, and have a flavor all their own. Some folks love them and some folks feed them to the pigs, who also love them. Can be used as ornamentals for their 6' annual foliage with yellow daisy-like flowers on top. Plant sunchokes in an area that is easy to control; they will spread and are difficult, if not impossible, to eradicate. Maine-grown without herbicides, pesticides or chemical fertilizers.
1# $4.00; 3# $11.00; 10# $26.00; 30# $66.00

SWEET POTATOES *Ipomoea batatas*

We are pleased to offer a selection of sweet potatoes chosen from two years of trials specifically for their ability to produce in our northern climate. They do not tolerate cold and are as tender as melons. With black plastic mulch and row covers, you can grow a decent yield of these delectable roots in the North. Our slips are grown by Alan Schwartz of Canton, MA. We will ship them separately in late May with growing and curing instructions included. Shipping is included in the price. NEW!
10 slips $10.00; 25 slips $16.75; 50 slips $28.00; 100 slips $50.00

7020 Beauregard red-orange skin, deep orange flesh Recent release well adapted to the North. High yields and attractive uniform shape. Resistant to growth cracks. Early maturity.

7030 Excel orange skin, orange flesh High yield of short chunky roots. Early maturity. Not commonly available. *Limited supply, order early.*

7040 Nancy Hall tan skin, yellow flesh Old variety often requested by name. Excellent flavor, waxy and sweet when baked. Produced the largest roots of the tan-skinned cultivars in our trials. Late maturity.

7050 White Yam white skin, white flesh Good yields of small sized roots. Wonderful sweet flavor and dry texture make it well worth growing. Late maturity.

COLLECTIONS

Having trouble deciding which variety to choose? We've put together collections to help. We reserve the right to substitute similar varieties should any become unavailable.

7060 Speciality Organics Selected for their colors and flavors—and all certified organic! Contains All Blue, pink Alaska Sweetheart, yellow German Butterball, Purple Viking, and Kerr's Pink (an Irish heirloom with pink skin and white flesh known for its heavy set of delectable steamers). Imagine a potato salad with this bunch! 2½# of each variety.
12½# $22.00

7070 Fantastic Fingerlings Introduce yourself to the world of fingerlings. Contains Banana, French Fingerling, Kipfel, Peanut (peanut-shaped, up to 4" long with lightly russeted tan skin and yellow flesh) and Rose Finn Apple. Beautiful baked in a spiral lightly dusted with garlic powder, olive oil and dill. 1# of each variety.
5# $18.00

7080 The Classic Starting with Cobbler and ending with Green Mountain, this collection of tried and true varieties will reward you with delicious spuds throughout the season. Also contains Carola, Dark Red Norland and Kennebec. 2½# of each variety.
12½# $15.00

SEED POTATOES *Solanum tuberosum*

#### Variety Name skin color, flesh color, shape, scab resistance

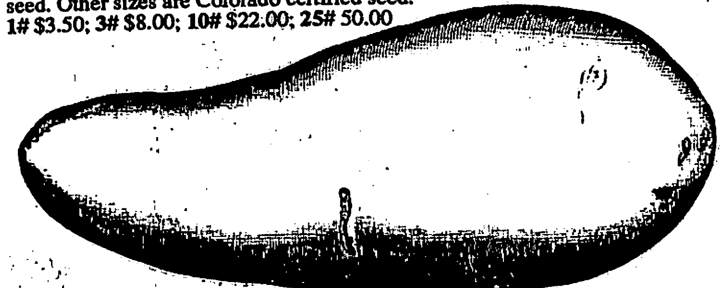
FINGERLINGS

Long and thinner than most potatoes with interesting skin and flesh colors. Fingerlings are very popular with restaurants, fresh markets and home gardeners, too. These beautiful potatoes tend to be quite prolific, late maturing and resistant to scab and rhizoctonia. Their flavor and culinary qualities are exquisite. The Colorado certified seed in this section is grown without synthetic insecticides, fertilizers, herbicides, and fungicides.

7125 Austrian Crescent tan, yellow, long, moderate We have limited quantities of early generation seed for this excellent popular fingerling. With tan skin and yellow flesh, Austrian Crescent can reach 10" and up to 18 oz. Wow! Wonderful as new potatoes, in salads or steamed. Medium-sized plants with mid- to late-season maturity. Colorado certified organic, Colorado certified seed. BACK!
1# $5.00; 3# $12.50; 10# $30.00

7135 Banana yellow, yellow, long, moderate Also known as Russian Banana. Probably the best-known of the fingerlings. Loved for its heavy yields of medium-sized tubers, luscious fingerling flavor and waxy texture. Huge yields (up to 30:1) can be obtained by providing optimum levels of water and nutrients, though average yields are 10:1. Plants are medium-sized and mature midseason. 1# size is MOFGA certified organic, Maine certified seed. Other sizes are Colorado certified seed.
1# $3.50; 3# $8.00; 10# $22.00; 25# 50.00

7145 French Fingerling dark rose red, yellow, long, resistant This spud wowed us all. A show-stopper with glistening smooth rose-red skin and rich yellow flesh occasionally splashed with pink. Creamy taste and firm texture make them great any way you use them. Producing numerous large tubers, French Fingerling is sure to become important for growers and home gardeners. Showed some resistance to potato leafhopper last season. Tall spreading plant. 1# size is MOFGA certified organic, Maine certified seed. Other sizes are Colorado certified seed.
1# $3.50; 3# $8.00; 10# $22.00; 25# 50.00



7150 Kipfel tan, yellow, long, resistant The large crescent shape caught my eye on this medium to large fingerling with tan skin and golden flesh. Waxy texture stays firm for salads or steaming. Heavy yielding and resistant to scab. Tall dark-green plants mature late. Colorado certified seed. NEW!
1# $3.50; 3# $8.00; 10# $22.00; 25# 50.00

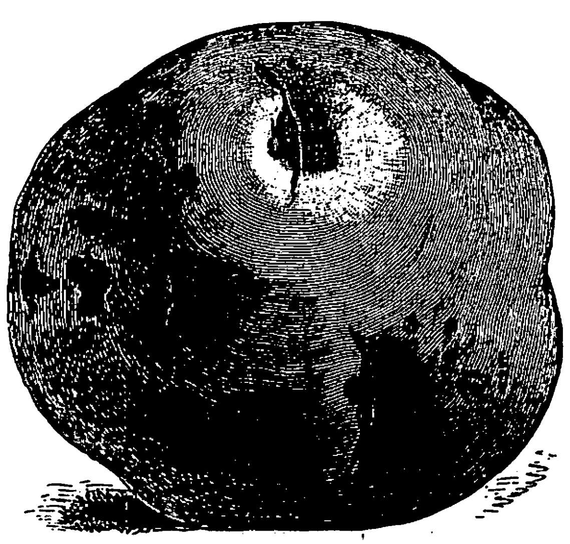
7195 Rose Finn Apple buff with rose blush, bright yellow, long, resistant One of my favorite potatoes, with smooth thin skin and firm moist flavorful flesh. David bakes them in a pan with whole garlic cloves, olive oil and kosher salt. Requires your best ground and prefers irrigation, but worth the extra trouble. Best yields are obtained by spacing plants 10-12" apart to avoid connected clusters. Large rose-blushed spuds and clean appearance make Rose Finn a real looker. Popular with growers for market and restaurants. Plants are medium-sized and mature late. 1# and 3# sizes are MOFGA certified organic, Maine certified seed. 10# and 25# sizes are Colorado certified organic, Colorado certified seed.
1# $3.50; 3# $8.00; 10# $22.00; 25# 50.00

EARLY under 70 days

7210 Caribe purple, white, oblong, resistant Easy and rewarding to grow because it sets tubers which size up quickly very early. Brilliant purple skin at harvest. We found crispy-skinned Caribe to be a flavorful and satisfying late winter lunchtime treat. The warehouse crew baked it day after day. Medium-sized high-yielding plant. Purplish-blue flowers. Resistant to scab, phoma, leaf roll and storage rot. Released by AgCanada in 1984. New Brunswick certified seed.
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

7220 Chieftan red, white, round-oblong, highly resistant Surpassed Norland's marketable yields by 181% in 1990 and 1991 university tests. Very good flavor, shallow eyes and good appearance make this a popular commercial variety and an excellent all-purpose red. Medium-sized plant with violet flowers. Resistant to scab, net necrosis, stem end browning and late blight. Maine certified seed.
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

7250 Dark Red Norland dark red, white, round, moderate A recent selection from Norland for its brighter skin color. Matures slightly later than its parent, with consistently higher yields. Norland has long been the standard early red, delicious for those first tubers of the year. When we think of eating new potatoes with parsley on a summer night, we think of Norland. Excellent for boiling and good for baking. Medium-to-large plants with purple flowers. Fair storage with medium dormancy. Maine certified seed.
2½# $3.00; 5# $5.00; 20#$11.00; 50# $14.00



7252 Early Blue blue, white with purple streaking, round, resistant Early Blue's beautiful deep blue skin, white eyes and white flesh lightly streaked with purple stood out in our 1997 trials. Medium-sized plants yielded a heavy set of smooth evenly sized tubers. All-purpose potato well suited for steaming, boiling and baking. Maine certified seed. **NEW!**
2½# $3.00; 5# $6.00; 20# $13.00; 50# $16.00

7254 Eramosa buff, white, oval, moderate We selected Eramosa for its very early high yields (200cwt/acre at 65 days). Oval tubers, semi-flat with shallow eyes and a nice appearance. Medium-large plants have deep violet flowers. Moderate resistance to common scab, resistant to rhizoctonia, hollow heart and skinning. Released by AgCanada-Ontario in 1987. New Brunswick certified seed. **NEW!**
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

7260 Frontier Russet light russet, white, oblong-long, resistant Good flavor, high yields, strong disease resistance and long storage make this our choice for a home-garden russet that will easily reach maturity in our northern climate. Tubers are smooth and lightly russeted. Frontier makes high yields of quality spuds. Excellent for baking and frying. Released by USDA in 1990. New Brunswick certified seed.
2½# $3.00; 5# $6.00; 20# $13.00; 50# $16.00

7270 Onaway buff, white, round, resistant Dependable all-purpose early variety that also stores well. Easy to grow because it sets tubers early which size up rapidly. Produces high yields from medium-to-large vigorous plants with pink flowers. Resistant to late blight as well as scab. Katahdin is one parent. Released by Michigan in 1956. Maine certified seed.
2½# $3.00; 5# $6.00; 20# $13.00; 50# $16.00

7275 & 7280 Red Gold red, yellow, round, moderate Red Gold continues to impress us with its delicious flavor and beautiful appearance. A top choice for the grower because of its high yield and earliness. Excels as a new potato for salads and baking. Does not store well. One of our best sellers. Introduced by AgCanada in 1987.
7275 Colorado certified organic, Colorado certified seed.
2½# $4.50; 5# $8.00; 20# $21.00; 50# $35.00
7280 New Brunswick certified seed.
2½# $3.00; 5# $6.00; 20# $13.00; 50# $15.00

Let the sky rain potatoes; let it thunder to the tune of 'Green Sleeves'...
The Merry Wives of Windsor V, v, 19

7300 Sangre red, white, oval, moderate A superb red for fresh market which sizes quickly for early digging. Excellent for new potatoes, boiled or baked. High yields. Skin is smooth, slightly russeted and retains its color. Stores very well. Released by Colorado and USDA in 1982. Colorado certified organic, Colorado certified seed.
2½# $4.50; 5# $8.00; 20# $21.00; 50# $35.00

7320 Tobique tan with pink splashing, white, oblong-blocky, highly resistant Tobique came through strong in our trials this year with good yields and nice appearance despite drought and leafhoppers. Attractive pink splashes on large tubers and early maturity are additional strengths. Excellent flavor and texture boiled or baked. Medium-sized plants with reddish-purple flowers resist verticillium wilt, fusarium storage rot and net necrosis. Released in 1976 by AgCanada. New Brunswick certified seed.
2½# $3.00; 5# $6.00; 20# $13.00; 50# $16.00

7340 Yukon Gold yellow-buff, light yellow, oval, susceptible Yukon Gold has good flavor, good storability, and drier texture than most yellows. Tubers are oval and slightly flattened with small pink eyes that distinguish it from other yellow-fleshed varieties. Now with excellent name recognition, it is often the only yellow-fleshed variety on supermarket shelves, and appears in gourmet catalogs. Very popular. Beware that Yukon is known for poor emergence and low yields. Resistant to mild mosaic and leaf roll. Released by AgCanada in 1980. Maine certified seed.
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

Leafhoppers: the Scourge of '97

Did you have brown and yellow leaf edges on your potatoes and beans last summer? The Northeast was inundated with a massive migration of potato leafhoppers damaging many crops, especially potatoes and beans.

Leafhoppers are wedge-shaped insects. The potato leafhopper *Empoasca fabae* is vivid lime green with variable white markings on the head and thorax, about 1/8-3/16" long. Passing through three life stages (egg, nymph and adult), they usually complete several generations a year.

Potato leafhoppers feed in the conductive vessels and disrupt the transport of nutrients through the plant, thereby reducing crop yields. Their visible damage is known as hopperburn. The injury starts as a brown triangular lesion on the leaf tip, spreading inward from the edges and eventually destroying the whole plant.

The potato leafhopper can occur in damaging populations anywhere east of the Rockies but rarely occurs in high densities in the Northeast. It generally overwinters only in the Gulf States. Flying adults were transported in upper-level airstreams that prevailed from the Gulf to the Northeast last late spring and early summer.

What can one do? Begin by monitoring your potato and bean patch around early June here in Maine. The threshold limit to begin treatment is 10 nymphs per 100 leaves. Some measure of control can be achieved with Pyrenone 6%, Pyrethrin/Rotenone 1% or insecticidal soap. The Rodale Institute recommends using equal parts Safer's Soap and alcohol; the alcohol helps the soap penetrate the insect's body. Row cover will keep the insects from the plants, provided you apply it before the insects arrive. Some varieties seem to show resistance to the leafhopper. These include Ozette, French Fingerling, Purple Peruvian, Purple Viking, NY L-235-4 and Elba. At this time, there is no known beneficial to control the leafhopper. We hope we won't see them in record numbers again.

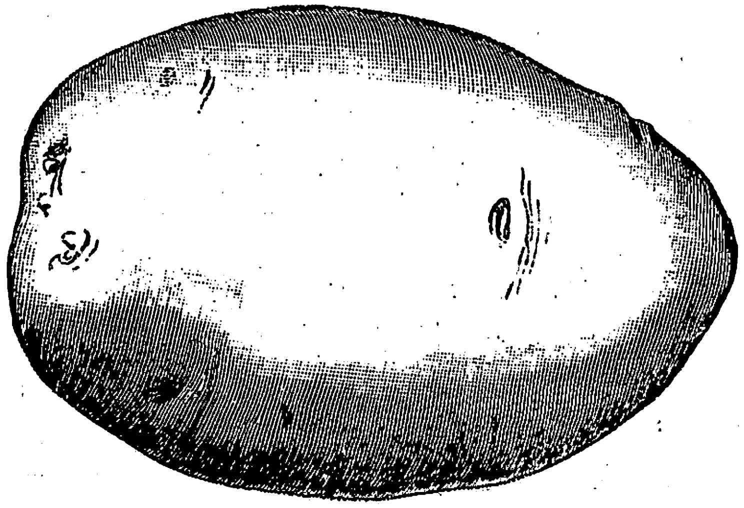
MID-SEASON 70 - 90 days

7410 & 7415 All Blue dark purple, bright purple, oblong, moderate Add zest and color to your potato meals! Brilliant purple flesh holds its color well when baked, our preferred method of cooking. Also good in soups and salads. All Blue has moved beyond the novelty stage and has a solid group of fans; one can even buy blue potato chips these days. Solid yields and vigorous medium-sized plants.
7410 Colorado certified organic, Colorado certified seed.
2½# $4.50; 5# $8.00; 20# $21.00; 50# $35.00
7415 Maine certified seed.
2½# $3.00; 5# $6.00; 20# $13.00; 50# $20.00

7420 All Red red, pinkish-red, round-oblong, moderate Picture a potato salad with red, white and blue potatoes! With its brilliant red skin and pinkish-red flesh All Red really caught our eye. Good yields and culinary qualities. Vigorous plant, medium maturity. Colorado certified organic, Colorado certified seed.
2½# $4.50; 5# $8.00; 20# $21.00; 50# $35.00

7430 Brigus blue-purple, cream, oblong, moderate Stood out in our trials for its high yields of large excellent tasting potatoes and its top performance in marginal growing conditions. Good any way you cook it; we grow Brigus for our use at home. Tall vigorous plant with blue flowers. MOFGA certified organic, Maine certified seed. *Limited supply, order early.*
2½# $4.50; 5# $8.00

7440 & 7445 Carola yellow, yellow, round-oblong, resistant Once known only to small-scale farmers and gardeners, Carola is becoming the "potato lover's potato." A staff favorite for its exquisite flavor and moist creamy texture. Introduced in 1979 from Germany, Carola consistently shows high yield, good disease resistance, and long storage. Top quality any way you cook it. Deservedly our best seller. Organic seed grown at WoodPrairie Farm.
7440 MOFGA certified organic, Maine certified seed.
2½# $5.50; 5# $9.50 20# $25.00; 50# $50.00
7445 Maine certified seed
2½# $3.00; 5# $6.00; 20# $13.00; 50# $15.00

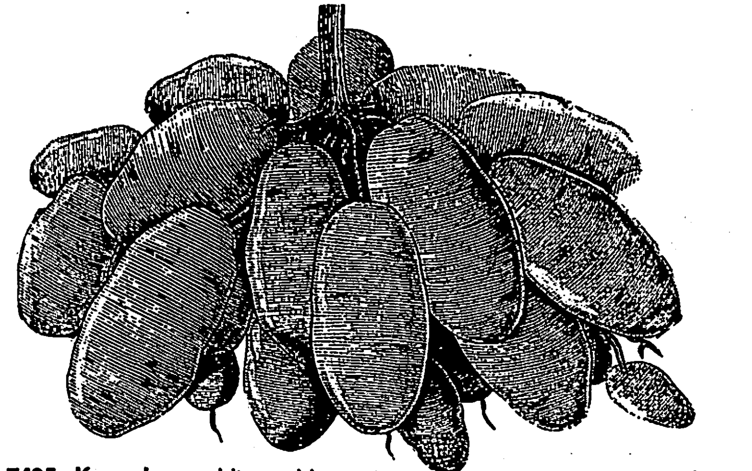


7450 Castile white, white, oblong, moderate We were impressed with Castile for plant vigor and yields during the difficult 1995 drought. It comes out of the ground clean and smooth. Delicious baked and fried. Medium-to-large plants with violet flowers. Resistant to golden nematodes and hollow heart. Moderately resistant to late blight. Bred by the USDA at Beltsville, MD, and developed by Cornell. New York certified seed.
2½# $3.00; 5# $6.00; 20# $13.00; 50# $16.00

7460 Cherry Red bright red, white, round, moderate Vivid red smooth skin, heavy yields, and resistance to blight characterize this excellent all-purpose potato. Matures one week earlier than Red Cloud. Plant 8" apart to obtain uniformity and control size. Maine certfied seed.
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

7465 Chippewa white, white, oval, moderate We chose Chippewa from our 1997 trials for its smooth clean appearance, large size, uniformity and nice potato flavor boiled or baked. Flattened oval tubers have shallow eyes, thin skin and moderate scab resistance. Medium to large spreading plant with light lilac flowers. Developed and released by the USDA in 1933. Same parentage as Katahdin. Maine certfied seed. **NEW!**
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

7475 Huckleberry red, pink, oblong, moderate Named after the wild huckleberry of the West. Tubers have maroon-beet-red skin and pink flesh marbled with white. Imagine them in a hot potato salad with green peas, shallots and dill. Tall plants produce a nice yield of large tubers. Colorado certified seed. Colorado certified organic. *Limited supply, order early.* **NEW!**
2½# $4.50; 5# $8.00; 20# $21.00



7495 Kennebec white, white, oblong, susceptible For decades Kennebec has been the standard home garden variety. Widely adaptable to varying soil conditions. Produces high yields of large delicious spuds for fresh eating and storage. Great any way you prepare them. Large plant with a dense canopy of white flowers. Resistant to late blight; susceptible to rhizoctonia. Released by USDA and Maine in 1948. Maine certified seed.
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

7500 Krantz medium russet, white, blocky-oblong, highly resistant Fine mid-season russet whose strengths include high yield, early tuber sizing, large vigorous plant size and extreme resistance to hollow heart, scab, and late blight. Excellent boiled or fried and good baked flavor. Emergence and early plant growth may be slow and irregular, but then you are treated to a display of snow white flowers followed by a good yield. Our Maine seed comes from the Devoes in Limestone, a farm family featured in the MOFGA Seed to Table display for the quality of their soil conservation practices. Maine certified seed.
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

7520 Purple Viking purple with pink splashes, white, round, resistant Looking for Daku's Round Purple? Some consider Purple Viking to be the same variety. Try some of these and you can join the controversy. In our trials they were very similar. The pink splashed purple skin and snow-white flesh make this potato stand out. Exceptionally crisp skins when baked. Produces a nice crop of lunkers. Compact plant with rounded leaves showed some resistance to hopperburn last season. Colorado certified organic, Colorado certified seed.
2½# $4.50; 5# $8.00; 20# $21.00; 50# $35.00

7522 Quaggy Joe white, white, round, moderate Named for the mountain behind Presque Isle, Quaggy Joe is attractive, mostly round, and medium-sized with white skin, pink eyes and gleaming white flesh. Widely adapted with high yields and resistance to net necrosis, blackspot and shatter bruise. Good boiled or baked and stores well. Recently released by the Maine Agriculture and Forestry Station. Maine certified seed. **NEW!**
2½# $3.00; 5# $6.00; 20# $13.00; 50# $16.00

7525 Reddale red, white, round, resistant We are pleased to be able to offer Reddale again after several years absence. Prolific producer of uniform large tubers that store well. Excellent boiled or baked. Resistant to scab. Grown by Jim and Megan Gerritsen at WoodPrairie Farm in Bridgewater. MOFGA certified organic, Maine certified seed. **BACK!**
2½# $5.50; 5# $9.50 20# $25.00; 50# $50.00

7530 Ruby Red red, white, round, resistant Living up to its name, Ruby Red wins the "Jewels of the Earth" award for its stunning red skin and high yields. The only red variety we grew not damaged by wire worms. Popular out West and deservedly starting to attract some attention here. A good all-purpose potato. Medium-sized plant. Maine certified seed.
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

7540 Russet Norkotah heavy russet, white, long, resistant Returned to our list by popular demand. An early fresh-market russet with very attractive appearance and thick skin best used as a baker. Marketable yields were 122% of Burbank's in university tests. Stores very well. Susceptible to verticillium wilt but resistant to scab, growth cracks and hollow heart. Released in 1987 by North Dakota, where it is a major seed variety. Maine certified seed.
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

7550 Saginaw Gold yellow, yellow, round-oblong, moderate One of our favorite potatoes, Saginaw has consistently performed well, even in the poor growing conditions of 1994-95. Excellent flavor boiled, baked or fried. Good disease resistance including rhizoctonia, and stores very well. MOFGA certified organic, Maine certified seed.
2½# $4.50; 5# $8.00; 20# $21.00; 50# $35.00

7560 Yellow Finn yellow, bright yellow, round-flattened, moderate This variety impressed me at the first tasting: superb flavor, buttery yellow flesh and creamy texture. Excellent baked or boiled, Yellow Finn has long been a standard variety in European specialty markets and is now gaining popularity in the US. Colorado certified organic, Colorado certified seed.
2½# $4.50; 5# $8.00; 20# $21.00; 50# $35.00

LATE more than 90 days

7615 Blossom red, dark red, tubular, moderate What a beautiful name! Available as certified seed for the first time, Blossom is a dazzler with its red skin and solid deep-red flesh. Large tubular tubers and good yields add to the beauty of this variety. So do its excellent mashing and baking qualities. Medium-sized spreading plant. Colorado certified organic, Colorado certified seed. *Limited supply, order early*. NEW!
2½# $4.50; 5# 8.00; 20# $21.00

7620 Elba buff, white, round, moderate Very late-maturing variety, with high yields and excellent boiling and storage qualities. Market grower Marybeth Fuchs described Elba as "the best boiled potato that I have ever eaten." Resisted the leafhoppers last season, showing renewed growth after they left. Hill well as they set high. Excellent resistance to late blight. Resistant to early blight, verticillum wilt and golden nematode. Maine certified seed.
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

7630 German Butterball yellow, yellow, oblong, moderate We are excited to be able to offer this golden heirloom. It has stood out in the trials in yield, size, vigor and especially flavor. Yields large, smooth, lightly netted potatoes. Drier than many yellows, it's best for mashing and baking. Large, spreading plant. Colorado certified organic, Colorado certified seed.
2½# $4.50; 5# 8.00; 20# $21.00; 50# $35.00

7640 Green Mountain buff, white, oblong-long, susceptible A popular heirloom variety which originated in Vermont in 1885. Good appearance and flavor with a dry texture. Known as an excellent baker with long storage. Despite some susceptibility to disease, Green Mountain finds its way from the garden to many supper tables in Maine year after year. Resistant to fusarium storage rot, black leg and verticillium wilt. Part of the viral roguing program in Maine, which works to keep exceptional but virus-susceptible varieties in the certification program. Maine certified seed.
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

7645 Island Sunshine yellow, yellow, round, moderate Two brothers in PEI developed this attractive yellow-fleshed potato with smooth skin and shallow eyes. Like most potatoes with European parentage, it produces an abundant set of medium-sized tubers. Excellent culinary qualities any way you cook it. Space at 10-12" to allow them to size up. Medium-sized late-maturing plants. Good tolerance to recently evolved strains of late blight. Jim and Megan Gerritsen grew these at WoodPrairie Farm in Bridgewater. MOFGA certified organic, Maine certified seed. NEW!
2½# $5.50; 5# $9.50 20# $25.00; 50# $50.00

7647 Katahdin buff, white, round, highly susceptible Widely adapted to northern soils and excellent as an all-purpose storage variety with very good appearance and medium to high yields. Tuber set is frequently near the surface; hill well to avoid sunburned tubers. Released by the USDA in 1932, Katahdin has stood the test of time and continues to be the standard to which other late season varieties are compared. Medium to large spreading plants with many large light-purple flowers. Maine certified seed. BACK!
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

7650 Mainstay white, white, round, moderate Last year's customers showed good interest in this attractive late-maturing white that has marketable yields averaging 125% of Katahdin. Like Katahdin, Mainstay is an excellent all-purpose potato and a good keeper. Resistant to verticillium wilt, net necrosis, fusarium dry rot, and early blight. Maine certified seed.
2½# $3.00; 5# $6.00; 20# $13.00; 50# $16.00

Late Blight

Late blight is caused by the fungus *Phytophthora infestans*, which fortunately survives for only a few days without a living host. Outbreaks are most likely to occur when temps around 60° are accompanied by fog, rain or heavy dew for four to five days.

Dark brown to purple lesions with pale green to yellow margins develop three to five days after infection. Velvety white spores form on the underside of the leaf soon after lesions appear. Spores die rapidly when humidity drops below 95%. Tubers can become infected before or during harvest. Infected tubers show a shallow sunken coppery-brown dry rot moving from the skin toward the center. These lesions frequently become infected by other bacteria and fungi causing a rapid breakdown of the tuber.

Although late blight can be contracted through the seed, the main cause of infection is from windblown spores spread during damp weather from poorly composted cull piles, volunteer potato plants and neighboring fields of infected potatoes or tomatoes.

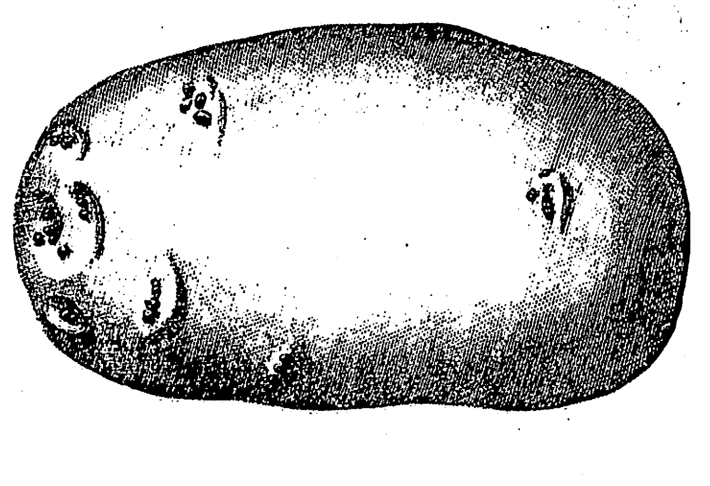
Use an appropriate control program if late blight is a threat in your area. MOFGA sometimes recommends a regular prophylactic spray schedule with copper, beginning when the plants are 6" tall and continuing every 7-10 days depending on weather. Please contact Eric Sideman at MOFGA, (207) 622-3118, or your local Cooperative Extension Service, for further information.

7660 NY L-235-4 white, white, round-blocky, susceptible Insect resistance without transgenics? Yes! Newly released by Bob Plaisted and Cornell University, this potato is the result of 20 years of classic plant breeding crossing our standard *S. tuberosum* with *S. berthautii* from the wild in Bolivia. L-235-4 has glandular trichomes or sticky hairs that resist insects, particularly flea beetles and leafhoppers and to some extent Colorado potato beetles. In our fields, even this season of the leafhopper plague, the plants had virtually no insect damage. Produces high yields of mostly large potatoes. Best for mashing or baking. Resistant to golden nematode and PVX. Moderately resistant to late blight. New York certified seed.
2½# $3.00; 5# $6.00; 20# $13.00; 50# $16.00

7665 Red Cloud red, white, round, resistant Late-maturing red with high yield, nice appearance and good long-term storage. Fine flavor no matter how you cook it. Grow some for your root cellar. Highly resistant to scab and early blight, tolerant to heat stress and hollow heart. Medium-sized spreading plant with dark violet flowers. Maine certified seed. BACK!
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

7690 Red Pontiac red, white, round-oblong, susceptible An old standard with many dedicated fans. Our favorite for mashed potatoes and winter storage. Large plants produce high yields of large tubers. Some tolerance to drought. Medium-deep eyes. Unless you're raising fodder for your spud cannon, plant closely to avoid oversized tubers, which can become knobby with second growth. Known as Dakota Chief for many years before its official release by USDA in 1983. Maine certified seed.
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

7710 W-1005-R heavy russet, white, long, moderate A late russet to replace Russet Burbank? Potato breeders have been trying for a long time and this one comes close. Higher yields of #1 grade potatoes, excellent storage and the mealy texture so loved for frying and baking are its strengths. Matured fine for us here in Central Maine. Requires 14-16" spacing and fertile ground to size up. Prefers irrigation. Medium upright plant. Maine certified seed. NEW!
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00



Brueghel · inuen ·
H. Cock · excud · 1570
Martius, Aprilis, Maius, ſunt tempora ueris ·
VER
Pueritiæ comparr
Vere Venus gaudet florentibus aurea ſertis ·

Organic Growers Supply

Third time's the charm, so the saying goes. I hope so as I begin my third year coordinating the OGS order.

As I learn more about growing, from mucking about in the garden, reading and, most importantly, talking to you, I realize that gardening teaches one certain truth: There is no one right answer. Or rather, there is one, and it is a simple one: "It's hard to say." Conditions are too variable, the weather is too changeable, the pests are too adaptable. One year we have a drought, the next year is too cold, and then the leafhoppers are blown up from the South. Through it all we persevere, hoping that the pleasures and benefits outweigh the troubles, and continuing even when they don't because utility was never the only measure.

At Fedco and Moose Tubers and OGS we try to answer all the questions put to us, and if we don't have an answer we go looking for one. When someone asks, "What should I do?" I have only two answers which I know are right: "Feed the soil," and "Follow your heart." It may not solve the problem, but it is a start.

David Shipman, OGS coordinator

We work closely with MOFGA to ensure that our products are acceptable. Since 1988 Fedco Seeds has been cooperating with MOFGA to offer the supplies that organic growers need. All our products are approved for organic certification.

New in Organic Growers Supply

- *New products this year include*: Lawn grasses including our own CR lawn mix. Sprayers and flame weeders. T-22, a new organic anti-fungal treatment for vegetable seeds and potato seed pieces which protects against rhizoctonia and fusarium wilt. Biodynamic preparations. Bug Barrier protective clothing.
- *We now accept Visa & MasterCard and fax orders.*
- *Changes to the order sheet.* We have gone to an EZ form. No more searching through many columns to find the item you want to order. If you are ordering many items or are collating a group order and need a grid, write or call and we will happily send you one.
- The $3 small order charge will be waived on your OGS order if the combined total of the orders sent in one envelope exceeds $50.
- *We have lowered many prices and included a separate charge for shipping*. The shipping weight for cover crops and soil amendments is the weight of the item; for other products, a shipping weight appears in parentheses by the price. Items with no shipping weight incur no shipping costs. Large orders still can be sent UPS Hundredweight or by common carrier, keeping the cost of shipping low.
- *You may have your OGS order shipped with your Moose Tubers order in April*. If you would like to receive your supplies with your spuds, check the "UPS in April" option on the order form, add the weight of your OGS order to the weight of your Moose Tubers order and pay shipping on the combined total on the Moose Tubers form only.

Additional Savings

- With our commitment to cooperation, we offer savings on large orders, volume purchases and pickups. We encourage you to take advantage of our discounts by joining or forming an ordering group with friends and neighbors. If you would like to put together a group order, but haven't the time or place to organize it, we will be glad to collate it and pack the orders separately in return for 7% of your order total. For pickup orders, a $100 order total is sufficient; for shipped orders, the total must be at least $250.
- *Savings on multiple bags* of soil amendments. Lower prices for purchases of 10 or more bags of one amendment. Even lower prices on pallet quantities. With our early order and pickup discounts, bulk buyers will realize substantial savings. Prices are FOB Clinton. Call (207) 873-7333 for shipping info. Shipping by common carrier, particularly in New England, is inexpensive.

How to Order Supplies

All orders must be on one of our 1998 Organic Growers Supply order forms. An order blank is in the center of the catalog on page 42G. If you need another copy or would like a grid order form, call us and we'll be happy to send it to you.

We've changed our **small order handling charge**; you may now **combine orders to calculate it.** Fill out all your Fedco order forms and send them in one envelope. If the combined total is over $50, pay no handling charge. If your total is less than $50, please enclose one $3 handling charge.

We have no minimum order size and welcome orders from individuals as well as groups. To encourage you to participate in a group order and to order early, we give discounts (see below). Sorry, you cannot combine orders for different divisions to figure discounts.

Payment with check, money order or credit card must accompany all orders. We request that all orders under $25 pay with a check or MO. Make your check out to Fedco, and send it with the order form(s) to **PO Box 520, Waterville, ME 04903-0520.** We now accept Visa and MasterCard. We will bill your credit card when we receive your order. We will bill or refund you for any adjustments as each order is completed. We cannot charge the adjustments to your credit card. If you pay with a credit card, you may **fax** your completed order form to (207) 873-7333. **Sorry, we do not take phone orders.**

Sales tax: Maine residents only! Items #9000-9999 are taxable. No tax on any other items. No tax for out-of-state residents. Maine farmers: Please send us your state resale number.

Deadlines

Orders received by:	qualify for:
Jan. 16	Early Pickup
Feb. 13	Volume discounts, March Pickup
March 20	Moose Tubers & Tree Sale Pickup

There is no final order deadline for OGS.

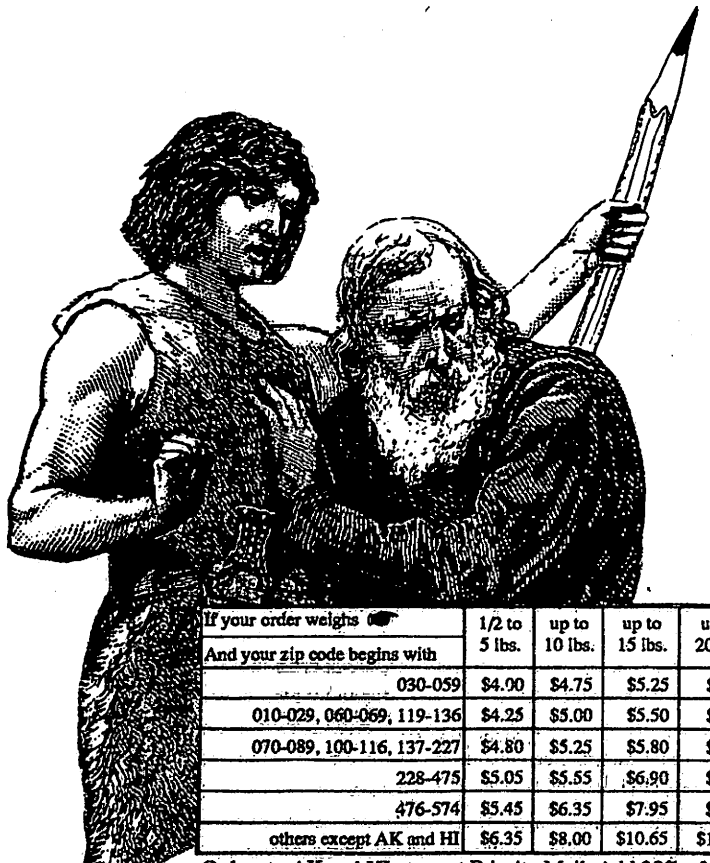
Discounts

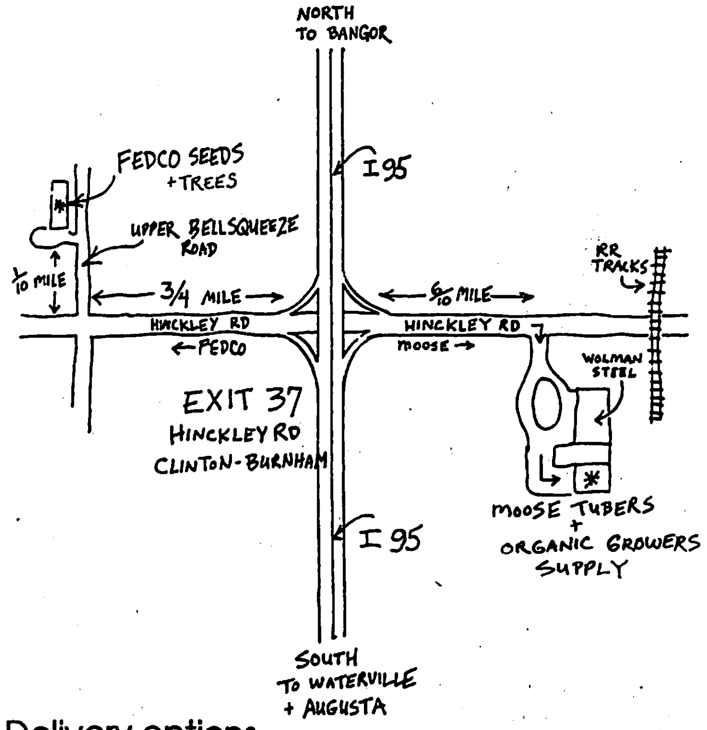
All discounts are figured on your total **before** adding shipping charges.

Volume discounts: We offer discounts on large orders to encourage cooperation. We must have your order in hand by February 13.

Orders over $100 deduct 5%
Orders over $250 deduct 10%
Orders over $800 deduct 15%
Orders over $1500 deduct 20%
Orders over $3000 call for a quote

Pickup discount of 5%: Orders must be picked up in our warehouse at one of the designated pickup times.





Delivery options

Please indicate on your order form how you want to receive your order. We ship via UPS (common carrier for large orders) or you can pick up your order.

UPS We begin shipping on Jan. 26. We ship orders in the order we receive them. Orders received before Jan. 26 will be shipped that week. Generally we will ship your order within two weeks; however, we will not ship orders received after March 21 before April 14.

You may opt to have your OGS order shipped at the same time as your Moose Tubers order. Shipping for Moose Tubers begins on April 14.

How to Use the Shipping Chart

- Find your zip code on the table below and read across to the column for the weight of your order to find your shipping cost.
- If your order weighs more than 45 pounds, multiply the weight of your order by the per-pound shipping price. If the weight of your order is 0, there is no shipping charge.
- If you decide to have your OGS & MT orders sent in one shipment, combine the weights of your orders to calculate your shipping charge and pay that charge once only, on your Moose Tubers order form.

Pickup Our warehouse is in Clinton, easy to find, less than a mile from I-95 exit 37. We send a postcard map and reminder to those planning to come.

Early Pickup Thursday and Friday, January 29-30, 9am-4:30pm. We must receive your order by January 16.

March Pickup Wednesday-Friday, March 4-6, and Monday-Friday, March 9-13, from 9am-4:30pm. We must receive your order by February 13.

Moose Tubers Pickup Thursday and Friday, April 9-10 from 9am-4:30pm, and Saturday, April 11, 9am-noon. We must receive your order by March 20.

Tree Sale Pickup Friday, Saturday and Sunday, May 1-3, from 9am-3:00pm. We must receive your order by March 20.

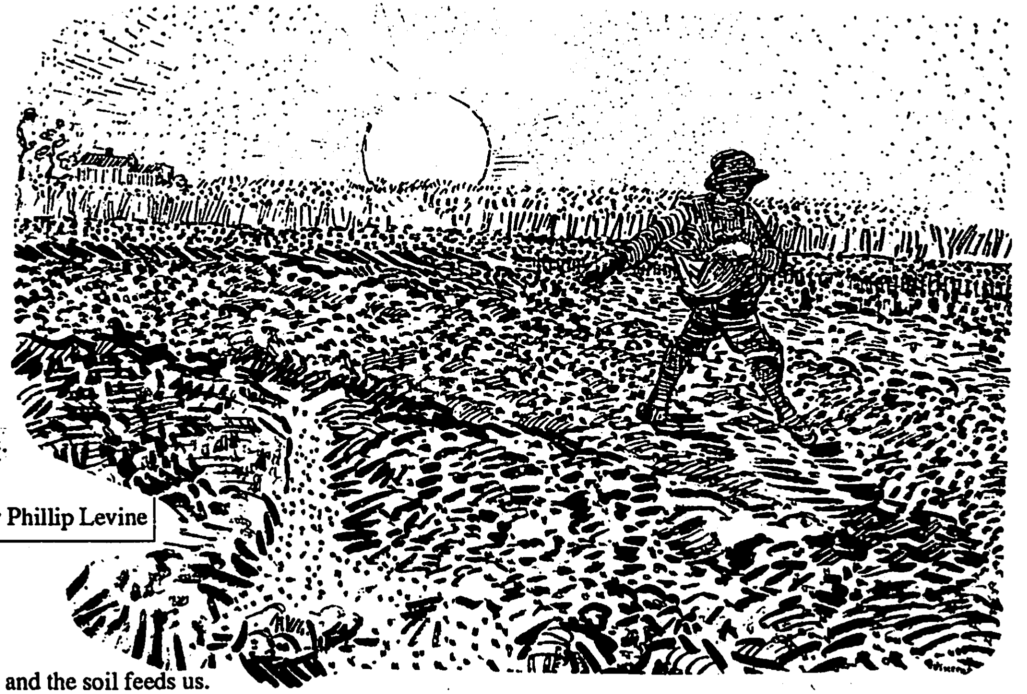
Other We do not recommend shipping by parcel post. If you desire a parcel post delivery, figure shipping charges the same as for UPS delivery.

Orders to *Alaska* and *Hawaii* are shipped USPS Priority Mail; shipping charges are 30% of your order total.

If your order weighs ☛ And your zip code begins with	1/2 to 5 lbs.	up to 10 lbs.	up to 15 lbs.	up to 20 lbs.	up to 25 lbs.	up to 30 lbs.	up to 35 lbs.	up to 40 lbs.	up to 45 lbs.	over 45 lbs.	over 250 lbs.	over 500 lbs.
030-059	$4.00	$4.75	$5.25	$5.75	$6.35	$7.00	$7.50	$8.25	$8.75	.18/lb.	.13/lb.	call for a quote 207-873-7333
010-029, 060-069, 119-136	$4.25	$5.00	$5.50	$6.50	$7.30	$8.25	$9.00	$10.00	$10.75	.23/lb.	.15/lb.	
070-089, 100-116, 137-227	$4.80	$5.25	$5.80	$6.90	$8.10	$9.25	$10.25	$11.30	$12.50	.27/lb.	.18/lb.	
228-475	$5.05	$5.55	$6.90	$8.00	$9.50	$10.90	$12.25	$13.75	$15.20	.33/lb.	.21/lb.	
476-574	$5.45	$6.35	$7.95	$9.80	$11.75	$13.60	$15.50	$17.35	$18.90	.41/lb.	.25/lb.	
others except AK and HI	$6.35	$8.00	$10.65	$13.55	$16.50	$19.10	$22.50	$24.75	$27.30	.60/lb.	.32/lb.	

Orders to AK and HI are sent Priority Mail. Add 30% of your order total for postage.

. . .I won't believe it,
but Tom will. Tom Jefferson
    is a believer.
You can't plant winter vegetables
    if you aren't,
you can't plant anything, except
    maybe radishes.
You don't have to believe
    anything to grow
radishes. Early August he's got
    sweet corn
two feet above his head,
    he stretches
his arm to show where
    they grow to.
Tomatoes "remind you what tomatoes
    taste like."
He was planting before the Victory Gardens.
    His mother brought
the habit up from Alabama. . .
    from "A Walk with Tom Jefferson" by Phillip Levine



Why use cover crops?

Use cover crops because they feed the soil and the soil feeds us.

Agriculture is a creative imbalance in nature, a region of excess organization begun and maintained by adding energy to a place. We can add energy in several ways. We can pump oil out of the ground and pour it on the soil in its guises as herbicides, pesticides and chemical fertilizers until the soil becomes dead dirt, a method that requires ever increasing additions of energy for ever decreasing returns. Killing the soil instead of feeding it. Or we can try for a sustainable addition of energy, soil amendments, organic fertilizers and cover crops to provide nourishment to the soils which nourish the plants which nourish us.

Cover crops take up and store needed elements for the crops which follow them, keep weeds down, host beneficial insects, improve the structure and arability of the soil, break up clay and hard pan. Most of all, as they die back and are turned into the soil, they provide food and energy for the real farmers, the organisms that live and thrive in a healthy soil feeding and caring for the plants. Use cover crops to create a system which can keep itself going, absorbing energy from the sun, taking up energy released by dying microorganisms, releasing it in the fullness of time to new generations of crops and microorganisms. Build a sustainable agriculture guided by intelligence and care and started from seed.

Cover Crops at a Glance

			Seeding Rate*			Organic Matter	
Cat #	Description	Planting Time	#/1000ft²	#/acre	Best Uses	produced/acre	Control
	Grasses and Grains						
8001-4	Kentucky Bluegrass	late spring or	1½-2#	45-65#	lawn and pasture		mow
8011-4	Red Fescue	late summer	2-3#	100-130#	lawn and pasture		mow
8031-3	CR Lawn Mix	spring/lfall	4#	140#	lawn		mow
8021-4	Annual Ryegrass	early spring -late summer	½-2#	14-35#	weed suppression, trap crop	3,300-4,000#	mow, till
8026-8	Perennial Ryegrass	early summer	½-2#	14-35#	weed suppression, trap crop	3,300-4,000#	mow, till
8041-3	Sorghum/Sudangrass	early summer	1-2#	10-36#	weed suppression, trap crop, green manure, forage	4,000-5,000#	tractor
8051-3	Timothy	spring or fall	½#	12-15#	hay, pasture grass	4400#	mow, plow
8101-3	Barley	spring	3#	60-90#	hay, weed suppression, grain	8,800#	till
8111-3	Japanese Buckwheat	spring-summer	2-3#	35-134#	weed suppression, trap crop for phosphorus and calcium, grain	Decomposes rapidly, leaving little residue	cut by hand or till
8121-3	Japanese Millet	spring	¾#	30#	weed suppression, green manure		cut and till or tractor
8131-3	Oats	early spring or fall	3-4#	110#	nurse crop, weed suppression, green manure, grain	6,000-8,000# spring 2,000-4,000# fall	tiller, tractor
8036-8	OG Pennuda Oats	early spring	2-3#		grain		
8151-3	Winter Rye	fall	3-4#	60-200#	weed suppression, trap crop, grain	3,000-4,000#	tiller, tractor
8161-3	OG Spring Wheat	early spring	4-6#		grain		
8171-3	Oilseed Radish	spring-fall	½-1#	5-12#	trap crop, soil conditioner nematode suppression	little	tiller
	Legumes & Clovers						
8201-4	Alfalfa	spring or fall	½#	15-20#	hay, pasture, nitrogen, green manure	2,000-4,000#	tiller or tractor
8211-3	Bell Bean	early spring	2-4#	80-170#	nitrogen, green manure, soil conditioner, hay, vegetable, bee forage	1,800-7,200#	tiller or tractor
8221-3	Field Pea	early spring	4#	100-220#	nitrogen, green manure, weed suppression, forage	5,100#	tractor
8231-3	Madison Hairy Vetch	fall	1#	20-40#	nitrogen, green manure	3,000-4,000#	mow then till
8241-3	Soybean	early summer	1-3#	50#	nitrogen, green manure	3,500-5,000#	tiller
8251-3	Soil-Building Mix	early spring	5#	212#	soil conditioner, green manure	8,000#	tractor
8301-4	Crimson Clover	spring	¼-2#	9-40#	nitrogen, weed suppression, green manure	2,500-3,000#	cut by hand or till
8311-4	Mammoth Red Clover	spring or fall	½#	7-18#	nitrogen, hay, pasture, green manure	4,500#	cut by hand or tiller
8321-4	Annual White Clover	spring	½-¾#	15-30#	soil conditioner, nitrogen, green manure	1,000-5,000#	till after winterkill
8331-4	Dutch White Clover	spring or fall	¼#	6-14#	lawn, undersown, nitrogen, green manure	little	mow then till
8341-4	NZ White Clover	spring or fall	¼#	6-14#	nitrogen, undersown, green manure	little	mow then till
8351-4	Yellow Sweet Clover	spring	1#	9-20#	nitrogen, green manure, bee forage	7,500#	mow in spring, till in fall

*Seeding rates vary depending on use and method of seeding

Grasses and Grains

8001-8004 Kentucky Bluegrass *Poa pratensis* The classic lawn grass and an excellent pasture grass. Resistant to cold, its growth slows in summer heat but will continue well into the fall. Sow spring or in fall with red fescue and white clover for lawns, or with timothy and red clover for pastures. Seed at 45-65#/acre for lawns, 1½-2#/1000 sq ft. New!
8001 2# $5.25; **8002** 5# $10.50; **8003** 25# $48.50; **8004** 50# $80.00

8011-8014 Creeping Red Fescue *Fescue rubra* Excellent grass for lawns and orchards, tolerates shade, but not soggy conditions. Good for steep locations and choking out weeds. Plant in fall to avoid weed pressure. Seed at 100-130#/acre, 2-3#/1000 sq ft. New!
8011 2# $3.50; **8012** 5# $7.75; **8013** 25# $30.00; **8014** 50# $48.50

Ryegrass *Lolium spp.* We now offer two varieties of ryegrass—annual and perennial. Ryegrasses tolerate a wide range of soil and fertility conditions and will grow well in conditions of low fertility. and acid soils. They have dense, fibrous and deep root systems; will withstand temporary flooding and are effective at holding soil and improving tilth. Cross-pollinate easily.

8021-8024 Annual Ryegrass *L. multiflorum* Seeded heavily in early spring or early fall, annual rye will establish quickly in cool wet weather, provide a dense cover and outcompete weeds. Seeded thinly, it is a good companion crop, suppressing weeds as the slower germinating crops get established. Uncut, annual ryegrass will grow to 2-4 feet, but should be kept mowed to prevent reseeding. Seed at 14-35#/acre ½-2#/1000 sq ft.
8021 2½# $3.75; **8022** 5# $6.50; **8023** 25# $25.00; **8024** 50# $40.00

8026-8028 Perennial Ryegrass *L. perenne* A short-lived cool weather perennial. Germinates quickly and grows rapidly, suppressing weeds and allowing slower-growing companions to establish themselves. For this reason it is often used in grass mixtures, coming up quickly, then fading as the other grasses get established. Perennial ryegrass can also be used as a living mulch in zones 5 and higher providing winter storm protection and weed control. Seed at 14-35#/acre ½-2#/1000 sq ft. New!
8026 2½# $4.50; **8027** 5# $8.25; **8028** 25# $41.00; **8029** 50# $68.50

8031-8033 CR Lawn Mix Recommended grass seed mixture for all-purpose use in the Northeast. 50% bluegrass, 30% red fescue, 15% perennial ryegrass, and 5% white clover. Good for a range of conditions, from full sun to partial shade. Bluegrass does well in full sun, red fescue in shade. Perennial ryegrass provides quick germination and good color while the other grasses get established, and the clover adds nitrogen and interest for the bees. Seed at 140#/acre, 4#/1000 sq ft. New!
8031 4# $9.00; **8032** 17½# $32.00; **8033** 35# $55.00

8041-8043 Sorghum/Sudangrass *Sorghum* x *drummondii* Vigorous hybrid summer annual is unsurpassed at suppressing weeds. Can grow to 6' if irrigated. Tolerates mowing and can be used for hay. Tends to lodge when planted thickly in fertile soil. Plant when ground is thoroughly warm. Seed at 10-36#/acre, 1#/1000 sq ft. Use the higher rate of seeding for weed suppression.
8041 2½# $3.00; **8042** 10# $9.50; **8043** 50# $35.00

8051-8053 Timothy *Phleum pratense* The earliest cultivated pasture grass, first cultivated in America by a farmer who found it growing along the banks of the Piscataqua River near Portsmouth, NH. In 1914 Timothy was called "by far the most important hay grass in America." (Forage Plants and their Culture by Charles Piper). Best adapted to clay or loam soils with lots of moisture, it produces good yields, resists lodging and is easily cut and cured. Timothy sown with red clover provides excellent forage and strong yields. The seed may be drilled or broadcast. Seed alone or with winter wheat in the fall. Seed with red clover, alsike clover, or alfalfa in the spring. Seed at a rate of 12-15#/acre alone or 9#/acre when mixed, ½#/1000 sq ft.
8051 10# $10.00; **8052** 25# $22.50, **8053** 50# $35.00

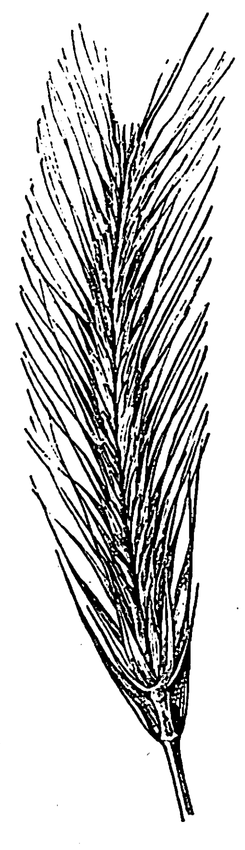
8101-8103 Robust Barley *Hordeum vulgare* A six row barley valuable as a cover crop and as feed, and invaluable in beer-making. Excellent spring cover crop, fast-growing and abundant, barley produces the most biomass of any grain and outcompetes weeds very effectively. Thrives on well drained, fertile soil but tolerates alkaline and heavy soils, tolerates drought. As a trap crop, barley takes up nitrogen. Barley grain is sprouted and toasted to make malt. For a home-grown home-brewing experience plant a hop plant (Fedco Spring 98 #2670) and barley. Maine-grown seed comes out of Aroostook with the potatoes. Seed at 60-90#/acre, 3#/1000 sq ft. *Not available for pickup until April 9. Cannot be shipped until April 13 and after.* New!
8101 5# $3.00; **8102** 25# $11.00; **8103** 48# $18.00

8111-8113 Japanese Buckwheat *Fagopyrum esculentum* Large-seeded type. Excellent smother crop. Easy to turn into the soil. Cut and incorporate when plant is newly in flower. Makes phosphorus available for next crop and loosens clay soils. Will grow on almost any soil but prefers light well-drained soils. Responds well to fertility, holding it for subsequent crops. Tolerates more soil acidity than any other grain crop. Short maturity allows 2-3 crops per season. Killed by frost. Bees like its white flowers and beekeepers prize buckwheat honey. Seed at 35-134#/acre, 2-3#/1000 sq ft.
8111 5# $5.00; **8112** 25# 18.50; **8113** 50# $29.25

8121-8123 Japanese Millet *Echinochloa frumentacea* Tender annual tolerates low soil pH but requires adequate nitrogen and potassium. Very good smother crop. Extensive root system. Mature plants are 6' tall and lush, and require a tractor to till in, though short plants can be incorporated with a tiller. Judy Rock of Main St. Co-op Market raves about millet: "Grows well with spreading roots even in poor soil. Makes a *lovely* plant. We harvest the seed heads for beautiful ornamentals and the birds love them too. Stalks *disappear* after winterkill and cause no trouble in spring." Try over-seeding millet into a spring crop to take advantage of a summer fallow period before fall planting. And remember to plant millet for the birds. Seed at 30#/acre, ¾#/1000 sq ft.
8121 2½# $3.00; **8122** 10# $7.75; **8123** 50# $28.50

8131-8133 Garry Oats *Avena sativa* This year we offer Maine-grown Garry Oats. Plant as winter cover in early September, as grain in early spring, or as a nurse crop when seeding clover. Oats will winter-kill and hold soil with a mat of vegetation. After early August garlic harvest. we plant oats in the garlic beds. They stay green into November and provide a ready-mulched bed in spring. Oatstraw tea nourishes the nervous system. Seed at 110#/acre, 3-4#/1000 sq ft. NEW!
8131 5# $3.00; **8132** 25# $11.00; **8133** 64# $18.00

8136-8138 Pennuda Hull-less Oats *Avena nuda* A mid-season medium-height grain with superior lodging resistance, almost completely free of the inedible hull of ordinary oats. After threshing, float any bits of hull away and air-dry. Then sit down and enjoy. MOFGA certified organic; grown by Jim and Megan Gerritsen at WoodPrairie Farm in Bridgewater. Plant 2-3#/1000 sq ft.
8136 2½# $5.50; **8137** 5# $10.00; **8138** 10# $16.50



8151-8153 Winter Rye *Secale cereale* The most popular winter cover in the Northeast. Best planted in early September to give good growth before winter dormancy, but may be planted as late as mid October. Incorporate in spring at least 3 weeks before planting. Undecomposed residue may inhibit germination and growth of subsequent crops. Seed at 60-200#/acre, 3-4#/1000 sq ft.
8151 5# $3.00; **8152** 25# $11.00;
8153 56# $18.00

8161-8163 Roblin Hard Red Spring Wheat *Triticum aestivum* Very early beardless wheat, high in gluten, makes superb bread flour. MOFGA certified organic; grown by Jim and Megan Gerritsen at WoodPrairie Farm in Bridgewater. Sow as early as possible in the spring at 4-6#/1000 sq ft.
8161 2½# $4.75; **8162** 5# $8.50;
8163 10# $13.50

8171-8173 Oilseed Radish *Raphanus sativus* Seeds can be pressed to make an oil similar to canola. Also called Fodder Radish because sheep relish it. Interplanted between grape arbors for nematode control. An excellent soil conditioner with a long taproot and many fibrous lateral roots, oilseed radish delivers good weed suppression. Especially valuable as a trap crop when legumes are plowed down in midsummer or manure is applied in late summer or early fall as it traps soluble nitrogen that would otherwise leach from the soil during the winter. Winterkills below 25° and locks up nitrogen and other soil nutrients to be released quickly when warm weather returns. Germinates with very little soil moisture and grows 1-3' in six weeks. Plow under before it goes to seed or delay fall planting so it will winterkill before setting seed. Seed at 5-12#/acre, 1#/1000 sq ft.
8171 2½# $9.25; **8172** 5# $16.00;
8173 25# $55.00

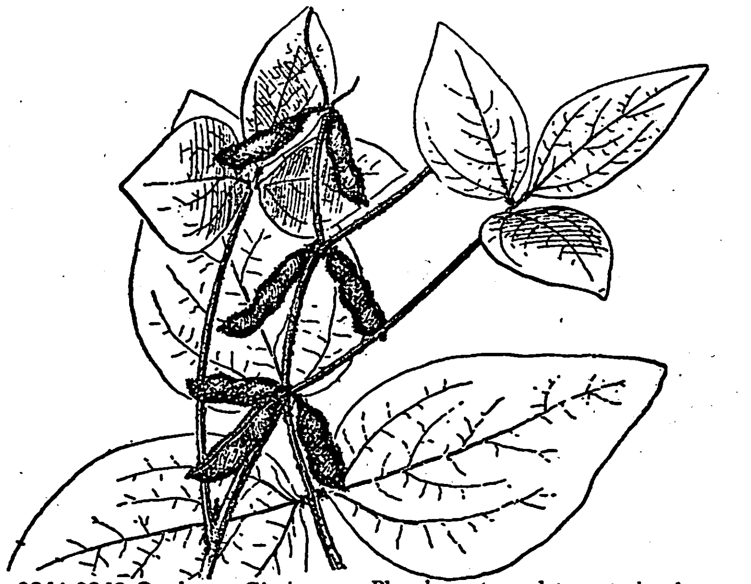
Legumes and Clovers

8201-8204 Alfalfa, Northrup King 919+ Perennial *Medicago sativa* Widely used in Southern and Central Maine for perennial alfalfa fields. Also suitable for garden use if you're planning to leave an area out of production for a season or two. Can be cut several times over the summer to make compost and to help eliminate perennial weeds. Herbalists harvest alfalfa to make a nutritious tea. Seed at 15-20#/acre, ½#/1000 sq ft.
8201 ½# $3.00; **8202** 2# $10.00; **8203** 10# $42.50; **8204** 50# $162.50

8211-8213 Bell Bean *Vicia faba* Highly recommended. Vigorous, small-seeded fava bean which can be planted very early, germinating and growing well in soils between 35-45°. Bell beans are an excellent choice for a green manure, providing large amounts of nitrogen and biomass. The taproot and large stems add organic matter to soils when turned under. Will tolerate a wide range of soil conditions and pH. Bell beans grow rapidly in cool weather producing as much as 100#/acre of nitrogen in just six weeks, up to 220#/acre in the course of a season. Aggressive taproot breaks up hard pan and mines the subsoil nutrients for succeeding crops. Alison believes bell beans increased the amount of calcium in her soil. Attracts bees and beneficial insects as well as improving soils. Plant with the earliest spring crops, seeding at a rate of 80-170#/acre, 2-4#/1000 sq ft.
8211 2½# $4.50; **8212** 10# 12.75; **8213** 50# $45.00

8221-8223 Field Pea *Pisum sativum* var, *arvense* Cold-tolerant, weed-smothering workhorse soil-builder. Likes cool moist growing conditions and withstands heavy frost. Fixes nitrogen at 170-190#/acre and produces lots of excellent hay or pasture for livestock. Will grow in most soil types but prefers well-drained loams. Sow alone or with a nurse crop such as oats to help it stand. The early shoots of field peas are a wonderful treat stir-fried or steamed. Seed at 100-220#/acre, 4#/1000 sq ft.
8221 5# $4.25; **8222** 25# $16.00; **8223** 50# $25.00

8231-8233 Madison Hairy Vetch *Vicia villosa* subsp. *villosa* Successfully and extensively tested by MOFGA farmers as well as UMO's Sustainable Agriculture program for winter hardiness in Maine. Excellent nitrogen fixation, 100+ #/acre. Plant with rye; the rye supports vetch vines in the spring and holds the soil over the winter better than the taprooted vetch. (See **#8261** Vetch/Rye Mix.) Tolerant of acidic soils and low fertility, but not poor drainage. Vetch is a vigorous grower, generating copious amounts of organic matter. Its vigor can create problems: Farmers using both flail mowers and sickle bar cutters reported clogging and tangling when they attempted to mow summer-sown vetch. Maine ag experts recommend later planting for better control. Use a flail mower in fall and plow under in spring before it becomes unmanageable. Seed at 20-40#/acre, 1#/1000 sq ft.
8231 2# $6.50; **8232** 10# $25.00; **8233** 50# $105.00



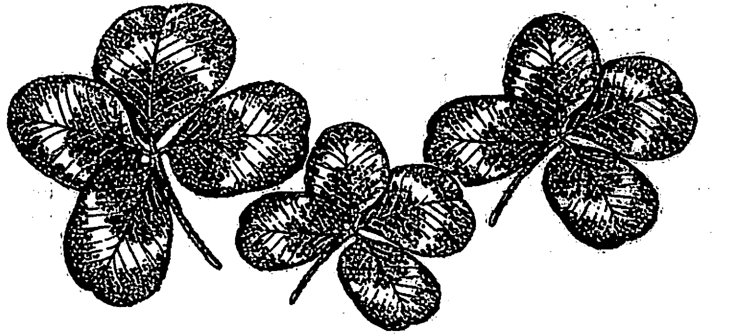
8241-8243 Soybean *Glycine max* Plowdown type; late-maturing beans may not ripen in our climate. Eliot Coleman suggests interplanting soybeans with corn a year ahead of potatoes in rotation to inhibit scab on the potato crop. An excellent nitrogen producer, up to 130#/acre. Very effective when mixed with buckwheat for smother crop/green manure. Killed by frost. Seed at 50#/acre 1-3#/1000 sq ft.
8241 5# $5.00; **8242** 25# $18.50; **8243** 50# $30.00

8251-8253 Soil-Building Seed Mix Recent Maine trials show this mix of oats-peas-hairy vetch to be a superior soil-building seed mix. Seed at 212#/acre ASAP in spring. In tests, this mix has created as much as 8000# biomass/acre at maturity. The oats come up first and are pulled down by peas, which are eventually pulled down by the smothering vetch. 4" mat of vegetation should be disked or mowed and incorporated in autumn. We use the hardy Madison vetch in our mix. Seed at 212#/acre, 5#/1000 sq ft.
8251 2½# $3.25; **8252** 10# $10.00; **8253** 50# $45.00

8261-8263 Madison Hairy Vetch/Winter Rye Mix Superb cover mix for fall-planting. Produces abundant green manure, adds nitrogen to the soil and suppresses weed growth. The rye acts as a nurse crop for the vetch, protecting it from frost damage and providing support for the vines, making subsequent mowing much easier. Excellent choice for a field that will not be planted the following spring. Mow after flowering to kill the plants, then incorporate by tilling, allow 3-4 weeks for the rye to decompose before replanting. Seed at 90#/acre, 2#/1000 sq ft. New!
8261 2# $3.00; **8262** 12# $10.50; **8263** 45# $37.50

8301-8304 Crimson Clover *Trifolium incarnatum* Rapid growth in cool weather makes this an excellent spring or fall green manure. A good choice for a cover crop in an orchard setting because it is shade tolerant, and its fast germination and thick growth provide good weed control. In June of '96 in warm wet conditions, ours germinated in two days and made a thick dark green carpet in a week. Handsome plant with bright green leaves. Stunning crimson spikes on 18" plants make good cutflowers. More disease-resistant than other annual clovers. Will grow on most well-drained soils. Seed at 9-40#/acre, ¼-2#/1000 sq ft.
8301 ½# $2.50; **8302** 2# $6.75; **8303** 10# $30.00; **8304** 50# 122.50

8311-8314 Mammoth Red Clover *Trifolium pratense* A short-lived perennial clover, best treated as a biennial, mown or grazed the first year, turned under the second year for green manure. Adds as much as 100#/acre of nitrogen in a season. Tolerates shade and can be undersown or overseeded into row crops and grains. Deep taproot raises nutrients from the subsoil. Best planted in early spring with a nurse crop of oats. Excellent hay crop planted alone or with grasses. In multiple hay cuttings it will produce as much as 7,120#/acre of dry matter in a season. A timothy/red clover mix produces more hay per acre than either planted alone. Seed at 7-18#/acre alone or 5-8#/acre when mixed with grasses, ½#/1000 sq ft. Red clover blossoms, fresh or dried, make one of our favorite teas, one which cleanses the blood gently and is safe for long-term use.
8311 ½# $2.50; **8312** 2# $6.25; **8313** 10# $27.00; **8314** 50# $105.00



8321-8324 Annual White Sweet Clover *Melilotus albus* var. *annua* Very effective soil builder produces a large quantity of biomass and its roots penetrate even hard pan soils. It grows in the crushed rock fill outside our warehouse. Quick to establish compared to biennial sweet clovers. Pennsylvania stands seeded in early May stood six feet high by July. Deep taproot mines phosphorus and other minerals from the subsoil, making them available to later crops. Good bee plant. Sensitive to soil acidity: needs pH 6.2-7.2 for proper nodulation for nitrogen fixing. Poor cold tolerance, growth slows in fall. Seed at 15-30#/acre, 3/4#/1000 sq ft.
8321 1/2# $2.50; **8322** 2# $7.50; **8323** 10# $35.00; **8324** 50# $137.50

8331-8334 White Clover, Dutch *Trifolium repens* A slightly lower-growing clover (6"), less tolerant of heat and sun than New Zealand Clover. Ideal for use in garden paths where it suppresses weeds, keeps soil friable and stores up nitrogen in its roots for next year's crops. The perennial white clovers are not heavy biomass producers, an advantage for small gardeners who can keep a "living mulch" in their garden paths without requiring anything heavier than a hand scythe or lawn mower to maintain control. We like clover in our lawn. It looks lush and feeds nitrogen to the grasses. Clover was pronounced a lawn "weed" when chemical companies started encouraging the use of broadleaf herbicides. Seed at 6-14#/acre, 1/4#/1000 sq ft.
8331 1/2# $3.50; **8332** 2# $10.50; **8333** 10# $45.00; **8334** 50# $172.50

8341-8344 White Clover, New Zealand *Trifolium repens* Hardy, long-lived and self-propagating perennial with a fibrous root system which spreads easily once established. Very useful as green manure or erosion control in steep or trafficked areas. Tolerates shade, mowing and excessive moisture. Grows best in clay to loam soils. Good bee forage. More vigorous and, at 8", slightly taller than Dutch variety. Our most popular clover. We planted Fedco Seeds '94 broccoli trials in soil that had a crop of this clover turned under 3 weeks before transplanting. Decomposed clover was the only fertilizer. The broccoli was outstanding in vigor, appearance and yield. Seed at 6-14#/acre, 1/4#/1000 sq ft.
8341 1/2# $3.25; **8342** 2# $10.00; **8343** 10# $45.00; **8344** 50# $172.50

8351-8354 Yellow Sweet Clover *Melilotus officinalis* We tried to drop this biennial clover last year, but the outcry from beekeepers persuaded us to keep it in our list. Long thick tap roots do an excellent job of breaking up subsoils and improving soil aeration. They bring up phosphorus and potassium in the process. Bees love it. Plant in spring with a nurse crop of oats for weed suppression. Most of its growth will occur the following year. Seed at 9-20#/acre, 1#/1000 sq ft.
8351 1/2# $2.00; **8352** 2# $4.00; **8353** 10# $16.00; **8354** 50# $62.50

Discontinued Seed

We're offering bargain prices on these because of slow sales.

8401-8403 Smooth Brome *Bromus inermis* Alison and Paul LaCourse say that old-timers up north swear by this deep-rooted sod-forming perennial grass used for pasture, hay, erosion control, cover and soil-building crop. The fine grass-like top growth decomposes quickly when turned under. By going dormant, smooth brome can survive periods of drought and extreme cold better than many of the more common pasture grasses. For pasture, sow 4-6# of brome with 6-10# alfalfa per acre in summer. Seed at 30#/acre, 3/4#/1000 sq ft.
8401 2 1/2# was ~~$7.00~~, now $4.00; **8402** 5# was ~~$12.00~~, now $7.50; **8403** 25# was ~~$45.00~~, now $32.50

8411-8412 Bird's-foot Trefoil *Lotus corniculatus* A low-growing perennial legume with stout roots and numerous slender, spreading branches 6-18" long. Valuable pasture plant resistant to heat and drought. Deserves more attention. Grows on land too poor to support red clover or alfalfa. Does well in shallow ledgy soil and tolerates salt. Seed at 12-18 #/acre, 1/2#/1000 sq ft.
8411 2# was ~~$10.00~~, now $7.50; **8412** 10# was ~~$42.50~~, now $30.00

8421-8423 Tetra-Petkus Rye *Secale cereale* Large-seeded variety of winter rye with superior baking qualities. Tall, with nice straw for plaiting straw hats. Large grains give lots of flour. Maine-grown organic. Seed at 3 1/2#/1000 sq ft.
8421 2 1/2# was ~~$4.25~~, now $3.50; **8422** 5# was ~~$7.75~~, now $6.50, **8423** 10# was ~~$13.00~~, now $10.00

Inoculants

8501-8502 Legume Inoculant For peas, beans, limas, favas, hairy vetch, sweet peas and our soil-building mix.
8501 Pkg treats 8# of seed (0#) $2.10; **8502** Pkg treats 60# of seed (0#) $3.50

You may also order inoculant on your seed order (#798).

8504-8505 Alfalfa/Clover Inoculant For alfalfa and the following clovers: annual white sweet clover, yellow sweet clover, white, crimson, and mammoth red.
8504 Pkg treats 10# of seed (0#) $1.80; **8505** Pkg treats 50# of seed (0#) $2.75

8507 Soybean Inoculant What else? For soybeans.
8507 Pkg treats 60# of seed (0#) $1.75

Legume Inoculation: Legumes such as beans, peas, clover and alfalfa make nitrogen from the air available to plants because their roots shelter a class of bacteria called rhizobacters. Rhizobacters live on the roots in a symbiotic relationship to legumes. The plant roots feed the bacteria while the bacteria take molecular nitrogen from the air and convert it into a form that the plant can use.
Different legumes require different species of rhizobacters to form a successful relationship. Our legume seed is sold "raw": It has not been inoculated with the appropriate bacteria in a process called "rhizocoating." Because the seed maintains good germination longer than the bacteria remain viable, we prefer to sell fresh inoculant each year and allow you to treat the seed at the time of planting.
Use fresh inoculant each time you plant a legume even if you have planted inoculated seed in the same spot before. When you are ready to put the seed in the ground, moisten it with water, pour the inoculant over it and mix. Protect from direct sunlight and plant before the seed dries out or remoisten and remix.

The cost of nitrogen from legume seeds

Legumes as cover crops have the great benefit of increasing the amount of nitrogen in the soil. This chart shows the cost of adding nitrogen by using cover crops. The price per pound is based on our largest size.

	Nitrogen producing Crop	#seed/acre	price/# of seed	average #N/acre	#N per acre/# seed	Price of #N	#N/ $1.00
8204	Alfalfa	20	3.25	100	5.0	.65	1.54
8213	Bell Bean	125	0.90	145	1.16	.78	1.29
8223	Field Pea	145	0.50	172	1.19	.42	2.38
8233	Madison Hairy Vetch	30	2.10	110	3.67	.57	1.75
8243	Soybean	50	0.60	67	1.34	.45	2.23
8304	Crimson Clover	25	2.45	100	4.00	.61	1.64
8314	Mammoth Red Clover	13	2.10	110	8.46	.25	4.02
8324	Annual White Clover	30	2.75	80	2.67	1.03	.97
8334	Dutch White Clover	10	3.45	130	13.00	.27	3.77
8344	New Zealand White Clover	10	3.45	130	13.00	.27	3.77
8354	Yellow Sweet Clover	15	1.25	130	8.67	.14	6.94

In addition to cost of seed, one must consider the time involved in preparing the seed bed and the loss from having the bed out of production.

The cost of nitrogen in fertilizers

	Fertilizer	%N	N/50#	price/50#	Price of #N	#N/ $1.00
8602	Alfalfa Meal	2.4	1.20	15.25	12.78	0.08
8617	Blood Meal	12.0	6.00	37.00	6.17	0.16
8632	Feather Meal	9.0	4.50	27.50	6.11	0.16
8637	Fish Meal	8.0	4.00	32.00	8.00	0.13
8702	Fertrell 3-2-3	3.0	1.50	17.25	11.50	0.09
8707	Ocean Organics 5-4-4	5.0	2.50	32.00	12.80	0.08

Fertilizers, besides being ready to use, as opposed to waiting for the cover crop to mature, make other nutrients available to plants. But for long term additions of nitrogen, cover cropping is an excellent way to go.

Rock Powders and Soil Amendments

Thriving sustainable agriculture is built on the ground of a healthy soil. Do a soil test to determine your soil's needs before embarking on a program of soil improvement. Check with your local Cooperative Extension for testing services in your area or use our mail-in service (#9201-2).

Rock powders and soil amendments used with a program of crop rotation, composting and cover cropping will restore fertility, improve soil tilth, promote disease resistance, support the population of soil micro-organisms necessary to plant growth and even help restore balance to the garden and the world around it. Used with organic fertilizers, rock powders and soil amendments will help address immediate fertility needs as well as long term requirements of sustainable growth.

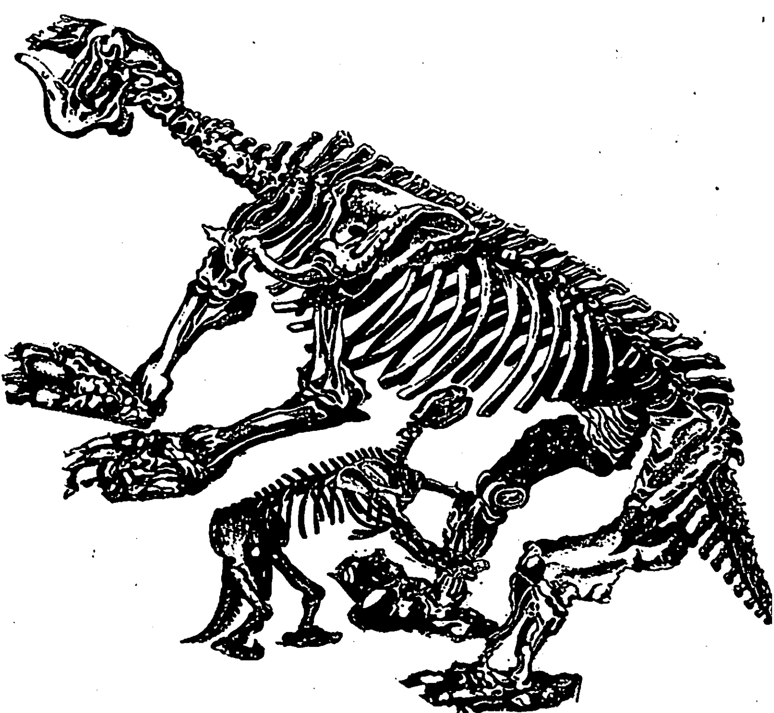
The demand for protein to feed meat animals curtails the availability and attractiveness of animal products as an efficient source of long-lasting nitrogen. We will continue to carry these products as long as the price remains reasonable and questions about their safety can be answered; however, prudence dictates putting a strategy in place now which will provide an alternative source of nitrogen by cover-cropping with legumes and using locally produced composted manure.

8601-8604 Alfalfa Meal (2.6-0-2.3 avg.) Excellent alternative to blood meal as a nitrogen source. Gives plants a noticeable quick boost. It is the nitrogen source in Fedco Bulb Fertilzer. Apply at 2-3#/100 sq ft or 800#/acre.
8601 5# $3.50; **8602** 50# $15.25;
8603 10+ $13.50/bag; **8604** pallet (40 bags) $485.00

8606-8609 Aragonite A source of calcium, usually crushed oyster shells, that is very low in magnesium. If you have been using dolomitic limestone over the years to sweeten your soil and add calcium, magnesium may be tying up other nutrients in your soil. A few years with aragonite will allow the soil to come back into balance.
New!
8606 5# $2.50; **8607** 50# $7.75;
8608 10+ $7.00/bag; **8609** pallet (40bags) $250.00

8611-8614 Azomite (0-0-2.5, 5% Ca) Contains over 67 minerals beneficial to plants and animals The name comes from the A-to-Z of Minerals including Trace Elements. Mined in Utah and passed through a 200 mesh screen. CR has grown better tomatoes ever since he started using azomite and likes it for corn and melons too. Roberta has added azomite to her garlic beds for the past six years. It has increased the proportion of huge heads in her harvest from about 10% to about 40%. Broadcast at 300-600# an acre. Be sure to use dust protection as it is a fine powder. Use in potting soil and compost. Especially effective as a foliar feed; allow the heavier portion to settle before adding to the sprayer. As a liquid fertilizer add 1 tsp per gallon. Approved for feed use as an anti-caking agent, feed at 1-2% of the mix. Bags range from 38-42#.
8611 5# $3.00; **8612** 40# $16.00
8613 10+ $14.25/bag; **8614** pallet (50 bags) $600.00

8616-8617 Blood Meal (12-0-0) Has the fastest release time of any organic nitrogen source. As a side dressing, apply at 3/4#/100 row ft. 3 wks after transplanting or 4 wks after seeding, or till into soil at 3-5#/100 sq ft. The increasing use of animal protein in cattle and swine feed is affecting not only the safety of commercially processed meat but also increasing the volatility of blood meal prices. We cannot offer a firm price for large quantities. If you are interested in buying 10 or more 50# bags, please call for a price quote.
8616 5# $6.00; **8617** 50# $37.00

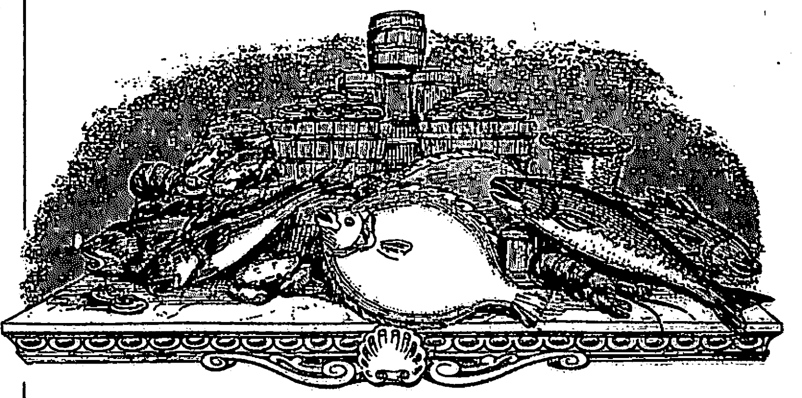


8621-8624 Bone Meal (1-11-0 plus calcium) Steamed ground bones. The source of the most readily available phosphorus and calcium for gardens, greenhouses and flower bulbs. Perennials love it; so do skunks. Use 1-2#/100 sq ft.
8621 5# $4.50; **8622** 50# $26.00
8623 10+ $24.00/bag; **8624** pallet (40 bags) $900.00

8626-8629 Colloidal Phosphate (18% phosphorus, 2% readily available. 21% calcium, trace minerals) This soft-rock phosphate is an excellent choice for calcium deficient soils, the phosphorus helps the plants take up the calcium. In addition, colloidal phosphate contains fine clays which help sandy soils retain water and nutrients. Use combined with green manures for soil rebuilding, or by itself to give plants immediate doses of phosphorus.
8626 5# $3.00; **8627** 50# $9.50
8628 10+ $8.75/bag; **8629** pallet (40 bags) $320.00

8631-8634 Feather Meal (9% nitrogen) A good source of long-term nitrogen. The nitrogen in feather meal is bound up in tightly coiled protein molecules which are slowly broken down by the action of soil microbes. Adding feather meal in the fall when late season cover crops are plowed under helps prevent nitrogen lockup in the spring.
8631 5# $4.50; **8632** 50# $27.50.
8633 10+ $25.00/bag; **8634** pallet (40 bags) $920.00

8636-8638 Fish Meal (9-3-1 plus 60% protein) If smell is anything to go by, this is our most potent amendment. Excellent source of nitrogen and phosphorus. Contains menhaden, fished for centuries up and down the East coast from Maine to North Carolina, as a source of fish meal and fish oil. Use as a side dressing applied at the same rate as blood meal or mixed into wetted compost to provide added nitrogen and a bacterial boost.
8636 5# $5.50; **8637** 50# 32.00; **8638** 10+ $29.00/bag

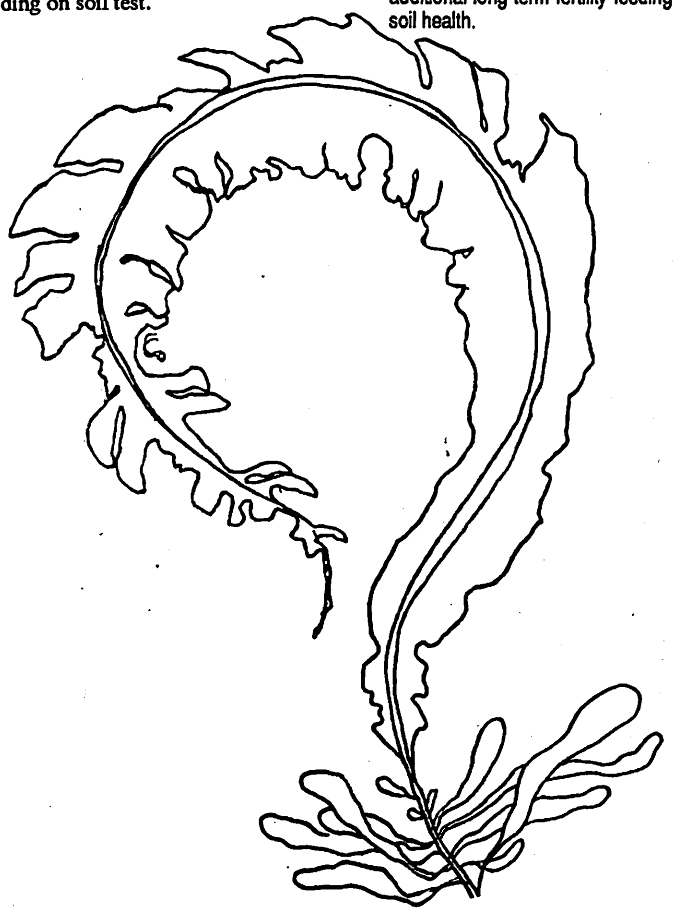


8641-8644 Granite Meal (0-0-5) A good source of potassium in the form of potash which plants need for sugar and starch production. Unlike wood ashes or Sul-Po-Mag, granite meal can be added to the soil in large amounts without altering the pH. Greatly enhances soil structure and promotes healthier plants. Application rates are 10#/1000 sq ft, or 4000# /acre.
8641 5# $3.00; **8642** 50# $9.00
8643 10+ $8.00/bag; **8644** pallet (40 bags) $285.00

8646-8649 Greensand (0-1-7, 3% Mg, 20% Fe) An heirloom soil amendment. "Greensand has been successfully used for soilbuilding for more than 100 years," according to Rodale's Encyclopedia of Organic Gardening. An organic source of potassium from 70-80 million-year-old marine deposits. Contains marine potash plus silica, iron oxide, magnesia, lime, phosphoric acid and as many as 30 other trace minerals. Loosens clay soils and improves sandy soils. Provides a slow release of potassium. Apply at 2-5#/100 sq ft. or 500-2000#/acre depending on soil test.
8646 5# $3.00; **8647** 50# $9.00
8648 10+bags $8.00/bag
8649 pallet (40 bags) $285.00

8651-8654 Kelp Meal Dried and ground seaweed contains trace minerals, enzymes and amino acids. An excellent source of naturally chelated elements. Brassicas respond well to it. Mix into the soil at the rate of 1#/100 sq. feet or 300-600#/acre. As an animal feed supplement it will improve production and enrich the manure for compost or crop application. Use at 1-2% of ration.
8651 5# $4.50; **8652** 50# $32.00
8653 10+ $29.00/bag;
8654 pallet (40 bags) $1,000

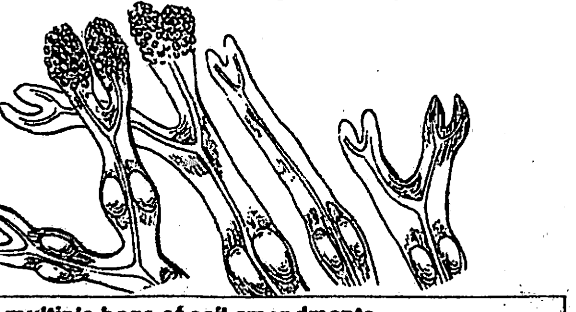
8656-8659 Planter's II Trace Minerals Fertilizer (0-0-.09, 5%Ca, 5%S) Mined in Colorado from the remains of the great inland sea, crushed and then pelletized with the addition of brewers yeast, Planters II is 14% silicon, 5% calcium and 5% sulfur along with 28 other trace elements necessary to plant health. In a study reported in a 1996 issue of Remineralize the Earth, a North Carolina high school student showed that all rock dusts improve the growth rate of mahogany seedlings, with Planters II achieving the best results. Our garlic planted in beds with Planters II had lusher, greener foliage and better shaped, more forthright bulbs. Apply at a rate of 100#/acre in rows or 250#/acre broadcast to improve germination and stimulate stronger root formation and overall plant vigor.
8656 5# $3.00; **8657** 50# $17.50
8658 10+ $15.00/bag;
8659 pallet (40 bags) $540.00



8661-8664 Rock Phosphate (30% total phosphorus) Rock phosphate has more total phosphate than colloidal and is less dusty. Phosphate from mineral sources breaks down and becomes available slowly. A well-balanced microbiologically active soil will improve the rate of availability. Apply quadrennially at 5#/100 sq ft or 1000-2000#/acre depending on soil test.
8661 5# $3.00; **8662** 50# $10.00
8663 10+ $9.00/bag; **8664** pallet (40 bags) $330.00

8666-8669 Sul-Po-Mag (0-0-22, 11% Mg, 17% S) Langbeinite, a marine deposit of potassium sulfate and magnesium sulfate, contains all three minerals in soluble form. A good source of immediate potassium for depleted soil and of magnesium where calcium is abundant. Alliums like its sulfur and potatoes like its quick boost of potassium. Apply $1/2$-1#/100 sq ft, 200-500#/acre depending on the results of your soil test.
8666 5# $3.50; **8667** 50# $13.25
8668 10+ $12.00/bag; **8669** pallet (40 bags) $425.00

8672-8674 Sulfur Used to lower soil pH. Not fine enough to be spread as a fungicide. Apply in small amounts 1-2#/1000 sq ft, 200-400#/acre. **New!**
8672 50# $23.00; **8673** 10+ 21.50/bag; **8674** pallet (40 bags) $800.00



Savings on multiple bags of soil amendments.
Soil amendments cost less when you buy 10 or more bags and are even cheaper by the pallet. The price is FOB Clinton. If you need to have them shipped, please call (207) 873-7333 for a shipping quote.

Fertilizers

Fertilizers provide nitrogen and nutrients in a form that can be taken up by plants as needed. Foliar sprays get nutrients directly to the leaves and are important sources of amino acids which increase resistance to disease and to insect infestation. Our products provide an immediate boost and, unlike inorganic chemical fertilizers, additional long term fertility feeding both the plants and the organisms that maintain soil health.

8701-8704 Fertrell Super (3-2-3) Organic slow-release plant food made with rock phosphate, peanut meal, blood meal, bean meal, chicken manure and sulfate of potash. Apply when planting at 2-3#/100 row ft and side dress at the same rate when plants are a few inches high. Can be used under transplants at ¼ cup per hole. Side dress later if needed.
8701 5# $3.50; **8702** 50# $17.25;
8703 10+ $15.50/bag;
8704 pallet (40 bags) $550.00

8706-8708 Ocean Organics Fertilizer (5-4-4) Custom-blended exclusively for us in Waldoboro. An organic mix of kelp meal, fish meal, rock phosphate, bone meal and feather meal, bound together with sea plant extract then pelletized at low temperatures to preserve the microbes and enzymes. Apply at 2-3#/100 row ft. For best results place fertilizers well below seed depth to encourage root growth.
8706 5# $5.50; **8707** 50# $32.00;
8708 10+ $29.00/bag

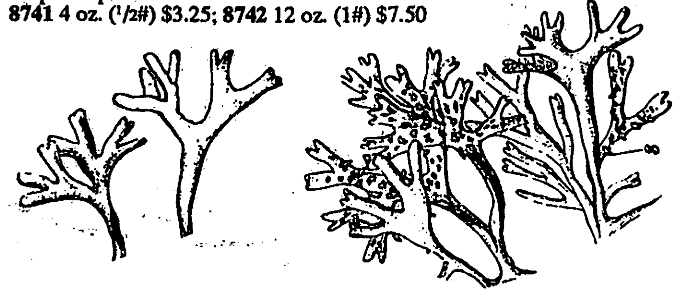
8721-8724 Organic Growers Supply Fish Emulsion (2-4-.5 with trace minerals) A natural organic fertilizer made from fresh North Atlantic fish. The nitrogen from fish protein breaks down slowly in the soil and won't leach out. Concentrated, use one ounce per gallon of water for garden application or foliar spray, two ounces per gallon as a compost enhancer.
8721 Neptune's Harvest 1 qt. (2#) $7.50;
8722 1 gal. (9#) $10.00;
8723 5 gal. (50#) $37.50; **8724** Neptune's Harvest 55 gal. (600#) $250.00

8726-8728 Sea Plus (3-2-2) Made by Living Acres, Sea-Plus combines the nitrogen, phosphoric acid and potassium of ocean fish emulsion with the trace minerals and amino acids of liquid seaweed. For best results spray plants in the forenoon during critical stages in the growth cycle. Dilute at the rate of 3 Tbsp. per gallon of water..
8726 1 pt. (1#) $5.00; **8727** 1 gal. (9#) $15.00; **8728** 5 gal. (50#) $55.00

8731-8733 Sea Cure Blend of marine plants provides nitrogen compounds, trace minerals, amino acids. Improves plant vigor, reduces transplant shock, increases resistance to insect damage and makes plants more frost resistant. The amino acids contained in seaweed improve disease resistance when applied as a foliar feed. Use as a spray in orchards and fields to help protect against insect infestation. Can be applied to seed, root or leaf. 1 pint makes up to 32 gallons of spray depending on application rate.
8731 1 pt. (1#) $5.00; **8732** 1 gal. (9#) $14.00; **8733** 5 gal. (50#) $50.00

8736 Wettable Seaweed Powder A highly concentrated powder. One package makes one gallon of liquid seaweed concentrate. Use the concentrate at a rate of one Tbsp. per gallon as an excellent foliar spray containing growth hormones, trace minerals, enzymes and carbohydrates. Keep powder sealed; it absorbs water.
8736 10.7 oz. (0#) $9.50

8741-8742 Foliafish Fertilizer (12-0-1) Stimulates vigorous plant growth with sprayable nitrogen. 4 oz. can makes 25 gallons of sprayable fish emulsion. Use 1 Tbsp. per gallon of water. Mix as much as you need and store the rest. We bought up the remaining stock from our supplier to offer at special prices.
8741 4 oz. ($1/2$#) $3.25; **8742** 12 oz. (1#) $7.50



Compost and Compost Starters

Shipping weight is in parentheses(#). No shipping charge for items with (0#) zero weight.

8751 BD Compost Starter An introduction to biodynamic composting. The starter contains six Biodynamic Compost Preparations, 502-507, plus stirred BD500 in sufficient quantity to treat up to $1^1/2$ tons of organic matter. The starter is designed for use by those just getting started in or curious about biodynamic farming. A Pfeiffer product. **New!**
8751 each (0#) $9.50

8752 BD Field Spray Concentrate For use just prior to turning in stubble or green manure, the spray contains BD preparations 502-507 with BD preparation 500 stirred in. Enough to treat 1 acre. **New!**
8752 each (0#) $17.00

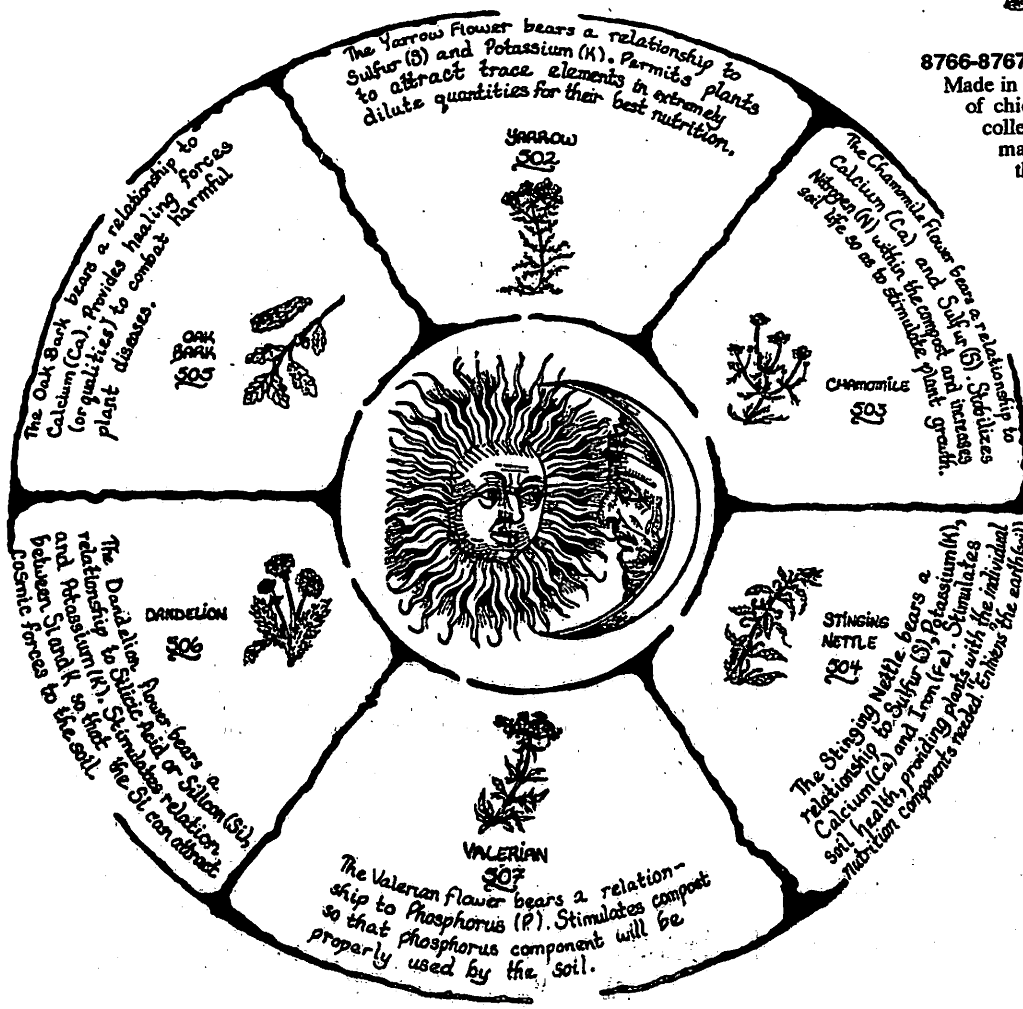
8753 Biodynamic Compost Preparations We have made an arrangment with the Josephine Porter Institute for Applied Bio-Dynamics to have sets containing their preparations of BD 502-507 to be drop-shipped directly to our customers. These are meant for use within three weeks of receiving them so please indicate your desired shipping date. They come with recommendations about how to store and use. **New!**
8753 set (0#) $17.00

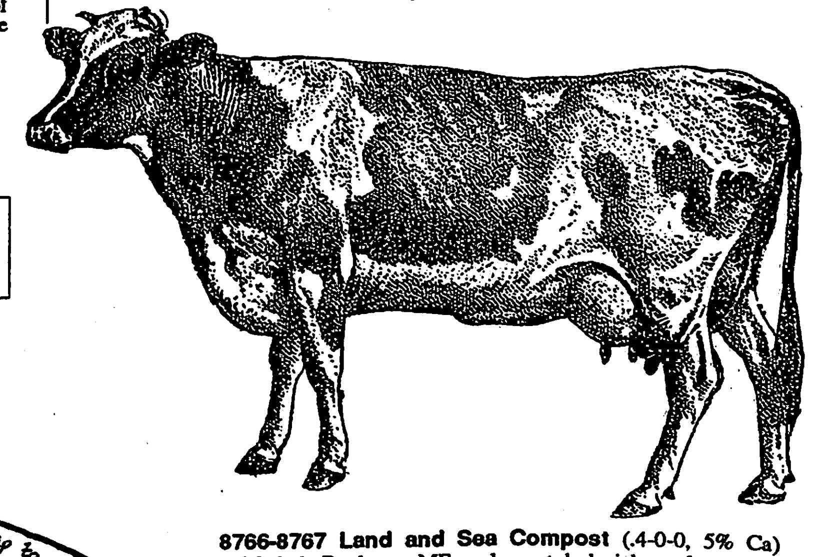
8756-8758 Saltwater Farms Compost Accelerator Composting is the digestion of organic matter by microbial action, which frees stored energy and nutrients. Adding Compost Accelerator to your pile releases millions and billions and trillions of microbes looking for a good meal. Includes seaweed which adds needed amino acids and humates which chelate the freed nutrients to humus for storage and easy uptake. Compost Accelerator sprinkled on the garden or lawn adds microbes and improves health and fertility.
8756 12 oz. (1#) $7.50; **8757** 2# $14.00; **8758** 4# $25.00

8761-8762 Amish Way Cow Manure Humus (1-1-1) A farm-made product from the Amish country of Pennsylvania. Blend of 35% cow manure with 55% organic matter, the end result of complete microbial digestion. Fussed over daily for 7-12 weeks and then subjected to 16 quality checks before being bagged. Has a neutral pH and good conductivity for cation exchange. Add to seed-starting mixture or to beds.
8761 40# $8.50; **8762** 10+ $7.50/bag

Rudolph Steiner designated these particular herbs/materials as those in the plant kingdom which held the particular elements in the best posssible form and/or ratio for use by the soil. For a good and readable introduction to Biodynamics, see the book #6508 A Biodynamic Farm by Hugh Lovel.

Biodynamic Compost Preparations


The Yarrow Flower bears a relationship to Sulfur (S) and Potassium (K). Permits plants to attract trace elements in extremely dilute quantities for their best nutrition.
YARROW
502
The Chamomile Flower bears a relationship to Calcium (Ca) and Sulfur (S). Stabilizes Nitrogen (N) within the compost and increases soil life so as to stimulate plant growth.
CHAMOMILE
503
The Stinging Nettle bears a relationship to Sulfur (S), Potassium (K), Calcium (Ca) and Iron (Fe). Stimulates soil health, providing plants with the individual nutrition components needed. Enlivens the earth (soil).
STINGING NETTLE
504
VALERIAN
507
The Valerian flower bears a relationship to Phosphorus (P). Stimulates compost so that phosphorus component will be properly used by the soil.
DANDELION
506
The Dandelion flower bears a relationship to Silicic Acid or Silicon (Si) and Potassium (K). Stimulates relation between Si and K so that the Si can attract cosmic forces to the soil.
OAK BARK
505
The Oak Bark bears a relationship to Calcium (Ca). Provides healing forces (or qualities) to combat harmful plant diseases.



8766-8767 Land and Sea Compost (.4-0-0, 5% Ca) Made in Rockport, ME, a pleasant dark rich amalgamation of chicken manure, sawdust, mussel shells and leaves collected in Camden and Rockport. High in organic matter, good for potting soil or direct application to the garden.
8766 40# $7.50; **8767** 10+ $6.50/bag

8771 Worm World Worm Castings (.77-1-1) Nature's soil builders, earthworms, leave behind wonderful humus residue in their passage through life. These castings, from worms fed sheep manure, corrugated cardboard and food wastes, are a rich mixture of micro-nutrients, microbial organisms and organic matter. Excellent top-dressing or potting mix ingredient.
8771 1 qt. (1#) $2.00

Plant Protection & Pest Control

Shipping weight is in parentheses(#). No shipping charge for items with (0#) zero weight.

All these products, ranging from preventive measures such as bat houses, to organic last resorts such as copper or Colorado Potato Beetle Beater, are commonly used in organic farming and gardening. We welcome your suggestions about successful low-impact pest control methods or products. We have added **#9314 Backpack** and **#9315 Pump Sprayers** to apply these products.

Caution: MOFGA *permits* using copper products and sulfur for plant disease control but not as a substitute for *recommended* practices of crop rotation and proper sanitation. Copper in high concentrations is toxic to plants, invertebrates and microbes. A soil test is required for organic certification if you use copper more than once in 3 years.

8801 Kocide Copper Hydroxide Copper is a strong broad-spectrum fungicide and should be used only for specific problems after all other attempts have failed. Kocide contains the equivalent of 35% metallic copper in micronized form increasing coverage and penetration. Copper hydroxide will penetrate leaf tissue to kill bacterial and fungal spores, however, it may cause leaf damage. Superior adherence and coverage. Recommended rates of application 3/4-3lbs/acre. **New!**
8801 2 lb bag $10.00

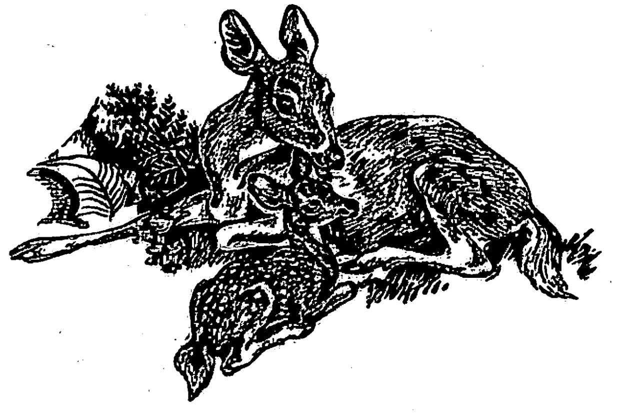
8806-8807 Copper Sulfate Will inhibit the germination and growth of fungal spores and control anthracnose, leaf spot, blights and downy mildew. In areas where late blight is a common problem, MOFGA sometimes recommends a prophylactic spraying. Can be used safely up to the day before harvest. **New!**
8806 5# bag $17.50; **8807** 50# bag $85.00

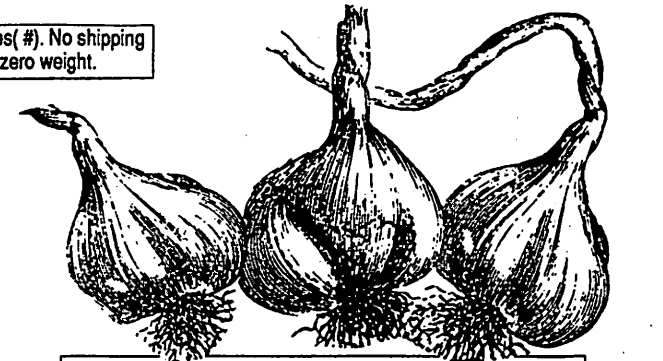
8811-8812 Micronized Sulfur Sulfur is not water soluble; the smaller the particle the better it stays in suspension. These particles are less than five microns. To apply, thoroughly mix powder with water and keep the mix agitated constantly. Used to control scab, powdery mildew and leafspot.
8811 1# shaker can $6.50 **8812** 30# bag $15.00

8821-8822 T-22 Biological Fungicide Beneficial fungus *Trichoderma harzianum* colonizes plant roots and protects against fungus-borne root diseases including pythium, fusarium and rhizoctonia. Controls seed rot and damping off. Expensive, but effective. Available in two forms. Planter-box powder for use as an inoculant on potato seed pieces and cabbage, bean, cucumber, tomato, corn and other crop seeds. Application rates range from 1/2 oz/cwt for potatoes to 4-10 oz/cwt for seed, higher rates for larger seed. Also in a granular form which can be applied at 10lbs/acre to the furrows as seed and potatoes are planted, in the holes for transplanted trees and as a treatment for potting mixes. **New!**
8821 T-22 Planter Box 1# $35.00; **8822** T-22G Granules 40# bag $95.00

8851-8853 Diatomaceous Earth Fine powder of microscopic diatom shells, the hard edges of the diatoms abrade the waxy surface of insects and slugs, dehydrating them. Sprinkle around the base of plants and seedlings to protect them from sow bugs, pill bugs, slugs and cabbage root fly or dust on the undersides of plants when they are wet from dew or freshly watered in cases of thrips damage. Its action is mechanical and affects both beneficials and pests, so use sparingly and only for specific problems. Excellent protection for stored grain and seed. DE comes in two grades: Pool filter grade, which is chemically treated and partially melted, a respiratory hazard for mammals and is not to be used for insect control. This natural grade does not pose a respiratory hazard and is the right type to use for insect control.
8851 1# $5.00; **8852** 4# $10.00 **8853** 50# $45.00

8856-8857 Green Screen Deer Repellent Developed for use in fruit orchards around Benzonia, MI, and manufactured by Lakeshore Enterprises, a vocational program set up by their local mental health agency, Green Screen is a packaged mixture of meat meal and cayenne pepper. In a test conducted at Michigan State University, it proved an effective deterrent to deer foraging in test plots baited with cracked corn. Paul and Alison reported similar success in their fields. Available as powder to be sprinkled around succulent plants, bulbs and veggies, or in cloth bags to hang from trees, shrubs or plants. **New!**
8856 3lb. box (3#) $15.00;**8857** 24 bags (3#) $15.00





And, most dear actors, eat no onions nor garlic, for we are to utter sweet breath, and I do not doubt but to hear them say, it is a sweet comedy.
A Midsummer-Night's Dream IV, ii, 43

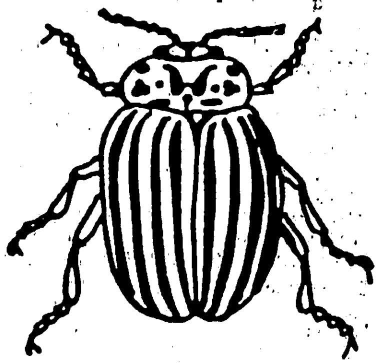
8861-8863 Garlic Barrier 100% garlic juice, just mix with water and spray to repel insects. It works. An application when the cabbage moths appeared kept our broccoli stir-fries truly vegetarian. Several studies have suggested that garlic oil has fungicidal properties. One warning: this stuff stinks, is best mixed outdoors. The odor doesn't last and the taste of the vegetables is not affected. One pint covers 40,000 sq. feet. Gallon is more concentrated and covers 20 acres.
8861 1 pt. (1#) $8.00; **8862** 1 qt. (2#) $13.00 **8863** 1 gal. (9#) $72.00

8871-8873 Insecticidal Soap Available in ready-to-use applicators or concentrated form. Biodegradable contact insecticide effectively controls mites, aphids, earwigs, lace bugs, leafhoppers, mealybugs, scales, spider mites, thrips, tent caterpillars and whiteflies. Fatty acids penetrate insect's soft outer membrane and disrupt normal functions. Mix the concentrate with alcohol to increase penetration. Hard water can reduce soap's effectiveness. Use 2 oz concentrate/gal water.
8871 12 oz. (1#) $3.00; **8872** 32 oz. (2#) $5.00; **8873** 24 oz. conc. (2#) $8.00

8901-8902 Wettable Bt Powder *Bt* var. *kurstaki* is the active ingredient in this powder. 1/4# size is garden strength, approx 4,320 I.U. per mg. 1# size is commercial strength, approx 32,000 I.U./mg.
8901 4 oz. (1/2#) $7.25; **8902** 1# $23.00

8906-8907 Liquid Bt For control of cabbage looper, cabbage worm, corn borer, tomato fruitworm and tomato hornworm. 8 oz size is *Bt* var. *berliner* with a potency of 4000 IU/mg. Use 2-4 tsp/gal. 1 qt size is *Bt* var. *kurstaki* with a potency of 8,800 IU/mg and is also effective on bagworms, gypsy moths, leafroller and spruce budworms. Rates from 1-4 pts/acre depending on pest and application method.
8906 8 oz. (0#) $9.25; **8907** 1 qt. (0#) $18.00

8911-8913 Colorado Potato Beetle Beater A liquid concentrate produced by genetic engineering whose active ingredient is *Bt* var. *san diego*. The gene responsible for producing the Bt toxin is spliced into a bacterium which is more easily cultured than Bt. The altered bacteria produce the toxin as an encapsulated crystal, which is then used in Beetle Beater. Use of this product does not release living organisms. Use 1.5 oz/gal water. One gallon covers 40-100 sq ft. depending on the amount of foliage.
8911 8 oz. (0#) $12.00; **8912** 1 pt. (0#) $19.00; **8913** 1 gal. (9#) $70.00



8916-8917 Novador *Bt* var. *thuringiensis* subspecies *tenebrionis* The only non-genetically engineered Bt for Colorado Potato Beetles. Application rates vary from 1-4 qts/acre depending on the size of the larval population. Available in 2 1/2 gallon and 6 gallon pails only, so buy it cooperatively. **New!**
8916 2 1/2 gal. (22#) $80.00; **8917** 6 gal. (55#) $175.00

***Bacillus thuringiensis*, better known** as Bt, is a biological insect control. Bt bacteria produce endotoxins (toxic proteins) which attack the digestive systems of insect larvae. Leaf-eating larvae and caterpillars ingest the protein which dissolves their intestinal walls and paralyzes their digestive systems. They stop feeding soon after ingestion and die within 2-3 days. Different varieties of Bt attack different insect species. *Bt* var. *kurstaki* is effective against cabbage worms, leaf-eating caterpillars and hornworms. *Bt* var. *san diego* and *Bt* var. *thuringiensis* subspecies *tenebrionis* are effective against Colorado potato beetles and elm leaf beetles. Apply when larvae first appear. Effective use requires uniform coverage of the plant's surface to ensure exposure. Because it is species specific, Bt won't harm beneficial insects. Breaks down quickly and can be used right up to harvesting. Follow directions on the package.

TOOLS AND SUPPLIES

Shipping weight is in parentheses(#). No shipping charge for items with (0#) zero weight.

We offer the best values available in seed-starting supplies, season extenders, tools and gardener care. We have trialed these items and use many regularly. Each has met our strict criteria for price, quality and durability. Many are the result of customer requests. We welcome your suggestions for further additions.

Seed-Starting Supplies

9001 Cedar Seedling Boxes Made in Maine from native cedar. These 6x9x3" seed-starting boxes offer a durable reusable alternative to Kord Paks for starting small lots of seedlings. Package of 5 boxes. Easy assembly, nails and instructions included.
9001 Pkg of 5 (1#) $7.25

9002 Cedar Plant Tray Maine-made from native cedar. 11x22x2 3/4" durable reuseable tray is a great alternative to plastic. Easy assembly, nails and instructions included.
9002 Each (1#) $5.50

9003 Seed Sower If you've ever tried to plant carrot seed from your hand on a windy day, you will appreciate this handheld plastic seed sower. An inexpensive way to help you distribute small seed evenly in the row. Round container has a see-through cover and a two-inch tapered spout. Cover rotates to one of five different-sized openings.
9003 Each (0#) $3.00

9004 Pot Maker Recycle your Sunday paper into an alternative to peat pots with this handy wooden gadget. Simple to use: Wrap a strip of paper 3" wide and 9" long around the core, press, twist, and you have an instant paper pot that will hold up until you are ready to transplant.
9004 Each (0#) $13.00

9005-9007 Kord Paks Handy flats the same size as plastic "six-packs" but without the dividers. Made of recycled cardboard fiber and breathe much like clay pots. Ample space allows for healthy root development. 4 drain holes in each. At 6 3/4x5 1/4 x2 3/4", 6 nest in a 1020 Tray.
9005 Pkg. of 6 (1#) $1.75 **9006** 100 (5#) $24.00; **9007** 500 (30#) $90.00

9010-9015 Jiffy Pots Eliminate transplant shock! Peat Jiffy Pots can be put directly in the ground without having to disturb seedlings. We now stock three sizes.
2" Round Convenient for small seedlings and for folks with limited space.
9010 50 pots (1#) $3.00; **9011** case of 4000 (35#) $135.00
3" Round Good for tomatoes, brassicas and melons.
9012 50 pots(1#) $3.50; **9013** case of 1500 (30#) $90.00
3" Square Can be more tightly packed than round pots. Saves space and conserves moisture.
9014 36 pots (1#) $4.00; **9015** case of 1000 (30#) $80.00

9016-9021 Plug Flats Available in 3 sizes: 38, 50 or 98 round cells. Also known as Pro Trays. Fit into standard 1020 Trays for easy handling in the greenhouse. Made of lightweight black plastic with bottom drain holes.

	Cells	Width	Depth
9016-9017	38	2.19"	2.31"
9018-9019	50	1.88"	2.31"
9020-9021	98	1.38"	1.50"

9016, 9018, 9020 Pkg. of 3 (1#) $4.00;
9017, 9019, 9021 Box of 100 (30#) $85.00

9022-9025 "1020" Plant Trays and Domes

9022-9023 Plant Trays Plastic trays with drain holes, used to start seedlings in the greenhouse. 10 1/2x21x2 1/4" and hold at least 18 3" jiffy pots. When the pots are damp we cram in several more.
9022 Pkg. of 3 (1#) $3.25; **9023** Box of 100 (30#) $62.50

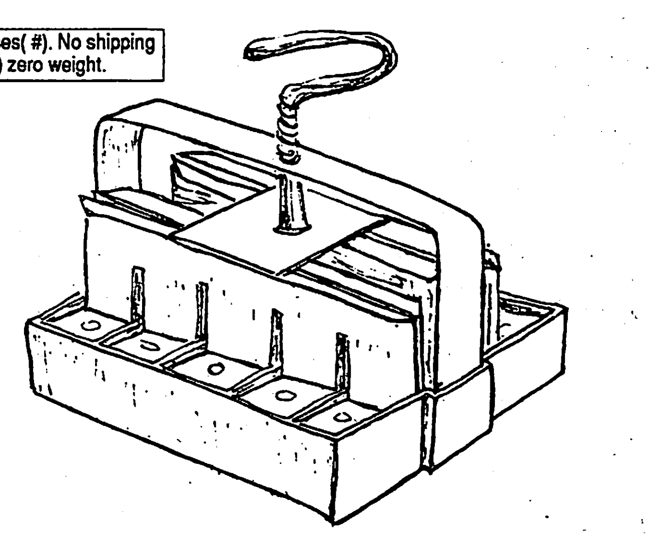
9023-9024 Domes Fit over 1020 Trays to create a miniature greenhouse for seedlings. Keep soil from drying out, speed germination, and ensure good early growth.
9024 Pkg of 3 (2#) $6.00; **9025** Box of 50 (30#) $85.00

9026-9027 Heavy Duty Plant Tray These sturdy 11x22x2 3/4" plastic trays will last for years and are strong enough to hold 50 2" soil blocks without strain. Good for windowsills because they have no drain holes. Store out of sunlight when not in use; will fade and weaken if left in the sun over the summer.
9026 Each (1#) $6.00; **9027** 10 (10#) 55.00

9028-9029 Heavy Duty Dome Sturdy domes from the supplier of our heavy-duty plant trays. Will last for years with reasonable care.
9028 Each (1#) $3.00; **9029** 10 (10#) 25.00

9030-9031 Heavy Duty Plant Tray & Dome Combo
9030 Each (2#) $8.50 **9031** 10 (20#) 75.00

9036-9037 Seed Tray Heater Chrome steel frame holds seedling trays above the heating element which plugs directly into a regular 110 volt outlet. Raises soil temperature 10-15° and speeds germination and growth. Two sizes.
9036 15 1/4x21" (7#) $42.50; **9037** 17x38" (12#) $70.00



Ladbrooke Soil Blockers

The genuine article, made in England by Michael Ladbrooke. There are many imitations on the market that can save you a few dollars, but the quality is not as good. The soil block system allows for easy transplanting and eliminates root spiraling.

9041 Soil Blocker Makes four 2" soil blocks in one stroke.
9041 Each (0#) $25.00

9042 Micro-Blocker Makes 20 blocks per stroke in a 3x4" area. Use when your space is limited or when you want a large number of transplants. Micro-blocks are easier to warm, speeding germination. Can be inserted into the 2" soil block to continue seedling growth.
9042 Each (0#) $20.00

9043 Inserts Square plastic inserts which can be installed in the 2" Soil Blocker to make the blocks ready to receive micro-blocks. Pry out the plastic nipple and screw in the inserts.
9043 Package of four with hardware (0#) $4.00

9044 Professional Soil Blocker Makes one 4" block per stroke. Each block has a cube-shaped depression in the top to accomodate 2" blocks. Allows seedlings going out late to continue root growth and development. Especially good for tomatoes and peppers.
9044 Each (0#) $90.00

9045 P2 Floor Blocker Makes 12-2" blocks at one time. Very helpful for large production. The long handle means no stoop work.
9045 Each (0#) $159.00

A successful recipe for soil block mix (with thanks to Eliot Coleman): Mix 2 buckets peat or Peat Free with 1/2 cup of lime and 2 cups of azomite. Add 2 buckets of sand, 2 more buckets of peat, 1 cup of rock phosphate, 1 cup of greensand, 1 cup of bloodmeal and 1 more cup of azomite. Mix well. Add 1 bucket of compost and 1 bucket of soil and mix again. Add water until the mixture is spongy but not soggy and start making blocks.

Potting Soil

9051-9053 Komplete Potting Mix (.2-1-.4, 1% Ca) A combination of humus-type peat and 20% compost. Uncompressed and ready to use, easy to handle, to start seeds in, and to keep moist. Screened at 1/2". Some applications may need lightening materials. Slightly acidic. Maine made, MOFGA approved.
9051 10 qt. (12#) $4.50; **9052** 60 qt. (60#) $14.00; **9053** 10+ bags $12.50

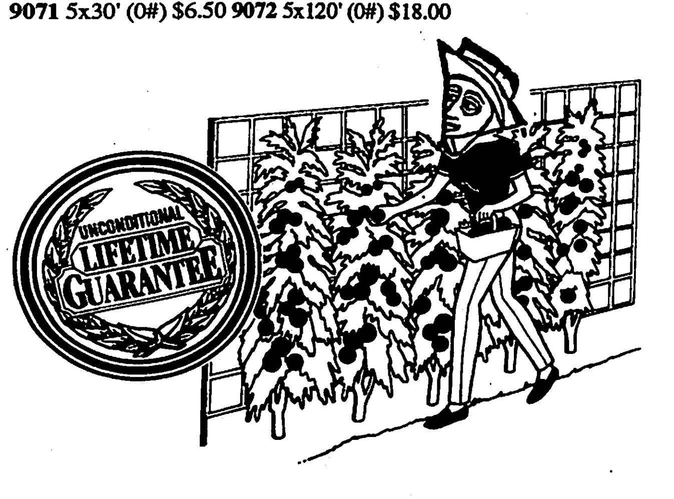
9056-9058 Komplete Light Potting Mix Living Acres creates a lighter potting mix by using sphagnum peat instead of humus peat and adding some perlite. Same 20% compost content as regular Komplete. Use if you want a more airy mix with less tendency to crust over. Maine made, MOFGA approved.
9056 10 qt. (9#) $4.50; **9057** 60 qt. (50#) $14.00; **9058** 10+ $12.50/bag

9061-9063 Cobscook Blend Potting Soil All-purpose growing medium blended from composted salmon, mussels, wild blueberries, sphagnum peat moss, grey granite, dolomitic lime and kelp meal. Light but with good water retention, drainage and aeration. Maine made, MOFGA approved. **New!**
9061 15# bag $5.00; **9062** 30# bag $7.50; **9063** 10+ $6.50/bag

9066 Peat Free Organic, biodegradable and environmentally sound substitute for peat moss. Compressed brick of coconut fibers that swells to eight or nine times its original size when placed in hot water. The fibers are quite short, but have excellent moisture retention capacity. Use in potting mixes or to add organic matter to your soil. Improves aeration and nutrient retention. Easy to store; three bricks make the equivalent of a half-bale of peat moss. Peat Free has been commended by the Wildlife Conservation Society as ecologically sustainable and supporting good conservation.
9066 3 bricks (2#) $7.00

Garden Fabrics

9071-9072 Trellis Plus 7" reach-through mesh with a strand strength of 60 lb. for tomatoes, climbing beans, peas, cucumbers and luffas. Weave a strand of fence wire through the top for extra support. Will last for many years if you can avoid "the tangles"!
9071 5x30' (0#) $6.50 9072 5x120' (0#) $18.00



9074-9075 Landscape Fabric Top-quality Weed-X brand landscape fabric is 3 layers thick to prevent weed growth in landscaped areas.
9074 3x25' (0#) $8.50; 9075 3x100' (0#) $25.00

PROFESSIONAL FABRIC
WEED-X
THE ULTIMATE POROUS LANDSCAPING BARRIER

9078 Burlap yard cloths 6x10', 7 oz. per yard. Use as a leaf tote or to collect your garden refuse for the compost pile. Blanket dug-up plants with damp burlap to protect them from sun and wind during transplanting. Untreated.
9078 6x10' (0#) $6.00

Closeout Special

9081-9082 Planters Paper Black paper mulch keeps down weeds to give seedlings a start, then breaks down and becomes part of the soil. Treated with a chlorinated phenoxy compound as a fungicide to delay breakdown. *Not approved for organic growers.*
9081 4x250' (15#) was ~~$30.00~~ now $15.00;
9082 4x1500' (65#) was ~~$105.00~~ now $65.00

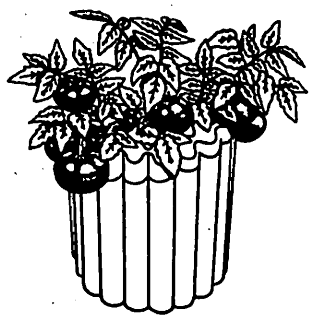
Season Extenders

9111-9113 Embossed Black Plastic Mulch Eliminates pressure from weed competition and increases soil temperatures. Put down a few weeks before planting to allow the soil to soak up some heat. Embossed texture increases strength and minimizes tearing. Not very aesthetic but gets the job done. 1.25 mil. 4' wide.
9111 50' (1#) $4.00; 9112 250' (5#) $18.00; 9113 2400' (40#) $130.00
9116-9118 IRT 100 Mulch Has the weed-suppressing qualities of black plastic and lets the infra-red light through to warm the soil beneath. Commercial grower Alan LePage wrote from his Vermont hilltop, "We're having a great season—thanks to IRT plastic! More eggplants, okra and corn than we've ever had. It made such a big difference this year." Alan also grows sweet potatoes on IRT under row cover. 1.0 mil. 4' wide.
9116 50' (1#) $4.00; 9117 250' (5#) $18.00; 9118 2400' (40#) $120.00
9121-9128 Pro-17 Row Cover Spunbonded polypropylene row cover, 0.5oz/sq yd. We prefer it to Reemay for its soft texture, flexiblity and resilience. Light enough to float on top of plants, but sturdy enough to provide protection against wind and bugs. It resisted abrasion from the thistly artichoke flower and the pouncing of the kitten on the pepper plants. Transmits air, water and 85% of sunlight. Provides 4° of frost protection. Available in both 6' and 10' widths. UV stabilized for extra durability.
9121-9123 6' wide,
9121 50' (1#) $8.50; 9122 250' (5#) $40.00; 9123 2550' (60#) $310.00
9126-9128 10' wide.
9126 50' (1#) $15.00; 9127 250' (5#) $70.00; 9128 1000' (44#)$215.00
9131-9133 Pro-30 Row Cover A medium weight row cover, more flexible than Typar. At 0.9 oz/sq yd it will provide 6° of frost protection, but still lets in air, water and 70% of sunlight. 5' wide.
9131 50' (1#) $13.00; 9132 250' (5#) $60.00; 9133 1000' (35#) $165.00

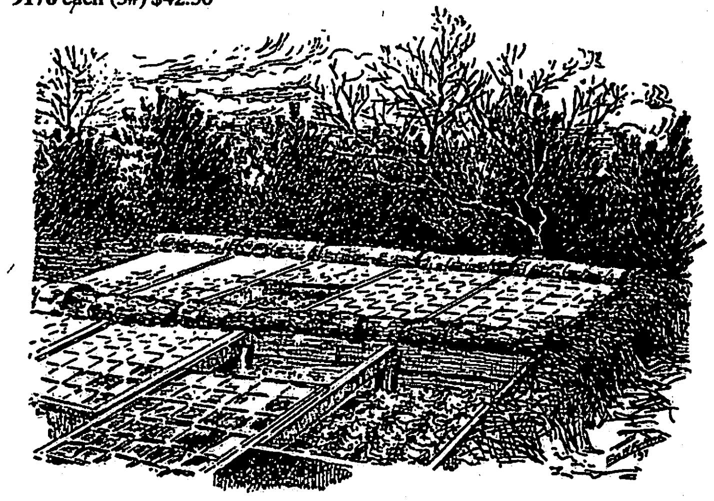
Closeout Special

9136-9137 Typar Spun-bonded polypropylene of great durability, yet will still let in light and water. Used commercially as a winter row cover for strawberries. Our experience suggests a useful life of two to three years. 1.25oz/ sq yd. Discounted due to slow sales.
9136 15x50' (2#) was ~~$50.00~~ now $37.50
9137 15x100' (5#) was ~~$105.00~~ now $75.00

9141-9143 Clear Slitted Plastic Row Cover Applied over wire hoops to form small tunnels, creating a greenhouse environment to promote the growth of heat-loving plants. Self-venting on hot days. Offers a few degrees of frost protection. Can be reused with care. 1.1 mil. 6' wide.
9141 50' (2#) $7.50; 9142 250' (10#) $35.00; 9143 1000' (40#) $100.00
9146-9147 Galvanized Wire Hoops For building tunnels with Pro-17, slitted plastic or other row covers. Most effective if spaced at 5' between hoops. 10 gauge wire, 76" long.
9146 Pkg of 20 (8#) $16.00; 9147 Pkg of 100 (35#) $65.00
9151-9152 Earth Staples The garden is full of rocks except when you need one to anchor the row cover. 6" galvanized wire staples neatly hold down landscape fabrics of all kinds. They kept our black plastic weed barrier in place all season.
9151 Pkg of 25 (1#) $2.25; 9152 Pkg of 100 (5#) $7.00
9161-9162 Wall o' Water Season extender for individual plants. Offers protection to 16°. Surrounds plant with plastic teepee 18" high, 18" across. Holds 3 gallons of water which absorb heat during day and release it at night to moderate temperature extremes. Put out two weeks ahead of transplants to warm soil.
9161 Pkg of 3 (2#) $8.00; 9162 Box of 36 (16#) $75.00
9163 Repair Kit Extend the life of your Wall o' Water.
9163 Each (0#) $1.25

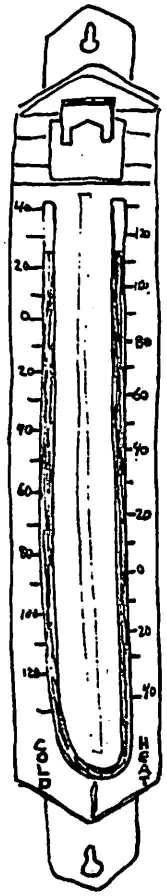


9165-9166 Greenhouse Umbrellas "Return with us now to those glorious days of the sixties and those wild mod fashions." Those at least were the words that came to mind when I first opened this clear plastic plant shelter with its high dome looking like nothing so much as a Carnaby St. bumbershoot. In fact, as its name suggests, it is a sturdy portable greenhouse 42" high by 40" across built on an umbrella frame so that it collapses for easy storage. Umbrella "handle" is a spike which stabs well into the ground. Ours stayed put through a normal season of summer storms and ripened an Early Chaca melon at the end of September which we direct seeded in mid-June.
9165 Each (2#) $13.00; 9166 Pkg of 5 (10#) $55.00
9171 Vent-o-Matic III Cold Frame A self-regulating cold frame 4' long and 3' wide, 15" high at the center. Rounded sides and top are made of virtually indestructable UV-resistant polycarbonate. Redwood frame resists rot and insects. The ghost in this machine is the solar device which monitors the internal temperature, opening the lid when the inside temperature gets too warm, closing it again as the air cools off. Now you can place seedlings and young plants outdoors as much as 6 weeks before the last killing frost and you don't have to be home all day to open the cold frame. Includes instructions for use as a food dehydrator.
9171 Each (30#) $120.00
9176 Solarvent Automated Window Opener The secret behind the Vent-o-Matic III Cold Frame is its vented window operated by this heat-sensitive arm. When the temperature inside the cold frame reaches 68°, the arm begins raising the window and is fully open (7½") at 75°, fully closing at 65°. Has a counter-balance spring which increases the lifting capacity. The Solarvent comes with plans to build your own cold frame. **New!**
9176 each (3#) $42.50



Taking Measure

9201-9202 Cook's Consulting Soil Testing Services A healthy well-balanced soil is the heart of good agriculture. We offer two mail-in soil test kits containing directions for sampling, a bag for the sample, and a mailing envelope. Our price includes analysis and recommendations for making organic soil improvements. Choose between two extensive tests. The Agricultural Soils Kit tests for pH, nitrogen, phosphorus, potassium, organic matter, soil texture, calcium, magnesium, sulfate, base saturation, cation exchange capacity (CEC) and aluminum. The Deluxe Agricultural Kit tests all the above and manganese, iron, chloride, copper, and zinc.
9201 Ag Soil Test (0#) $17.00; 9202 Deluxe Ag Soil Test (0#) $25.00
9205 Garden pH Test Kit pH is the key to plants' ability to take up nutrients. An inexpensive method for approximating your soil's pH and determining amount of limestone needed to redress imbalances. Includes instructions and materials for 8 tests.
9205 Each (0#) $5.00



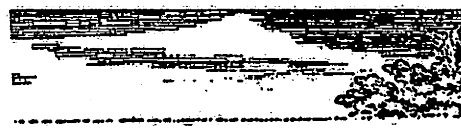
9206 pH Meter If you find the reading from a pH test slightly muddied, a clearer answer can be had by using a meter. Prepare a slightly moistened spot in the soil you wish to test, free of rocks and other large matter. Activate the probe with sandpaper, and in a few minutes the needle registers soil pH precisely.
9206 Each (0#) $7.50
9207 Garden Soil Test Kit Contains reagents for approx. 8 tests each of soil pH, nitrogen, phosphorus and potassium. Includes instructions, test tubes, and information booklet.
9207 Each (0#) $13.50

9211 Tru-Chek Rain Gauge Accurate wedge measures up to 6" of rainfall. Bigger gauge designed to give more precise readings than the Town and Country model we've offered in the past. Measures increments as fine as 0.01". Comes with hardware for mounting on a post.
9211 Each (0#) $6.50
9212 Taylor Max-Min Thermometer Records the high and low temperatures since the last setting. Especially useful for monitoring the greenhouse or for calculating degree days. Gives reliable data for bragging about temperature extremes. Easy-to-read scale measures from -40° to 130°.
9212 each (0#) $21.00

Closeout Special

9213 Compost & Soil Thermometer Encased in metal with a pointed tip, it probes 13" into the compost or soil to measure temperatures accurately from 20-220°. Takes the guesswork out of when to plant the corn, or whether your compost pile is hot enough to kill weed seeds and unwanted organisms. We now offer unbreakable compost and soil thermometers.
9213 each (0#) was ~~$17.50~~ now $15.00
9214 Replacement Glass for compost thermometer. Replace glass by unscrewing the red ball on top and slipping the new unit in the place of the broken one.
9214 each (0#) ~~$13.00~~ now $11.00

9221 Taylor Soil Thermometer 5" stainless steel probe to monitor soil temperatures at planting depth to gauge the optimum time for planting. Avoid damping-off and other temperature-related problems. **New!**
9221 each (0#) $13.00
9222 Reotemp Compost Thermometer 20" stainless steel probe, this bi-metal thermometer has a 2" dial registering from 0-200°. Virtually indestructible. **New!**
9222 each (0#) $25.00

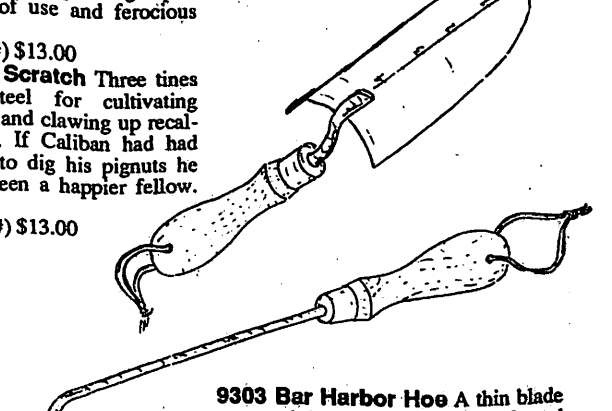


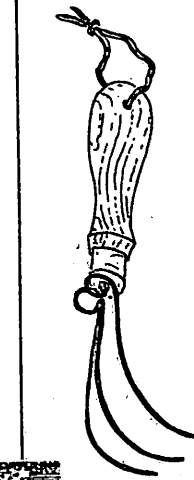
Tools

Garden Tools of Maine

The rockbound coast has given us some rockbound soil. Not just any tool is up to the task of digging through it. These high quality English-forged blades are permanently affixed to Maine Ash handles and secured by a brass ferrule. Assembled in Maine and built to last.

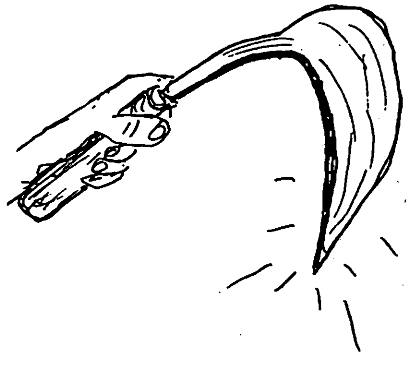
9301 Trowel A heavy duty trowel, the blade is 5¾" long by 3" wide with a 1¼" deep arc. Blade calibrated in inches to judge planting depth. Stands a lot of use and ferocious prying.
9301 Each (1#) $13.00
9302 Maine Scratch Three tines of spring steel for cultivating around plants and clawing up recalcitrant weeds. If Caliban had had one of these to dig his pignuts he might have been a happier fellow. 9" long.
9302 Each (1#) $13.00





9303 Bar Harbor Hoe A thin blade set at right angles to the shaft and bent lower than the shaft. Use it to reach under weed roots and pull them toward you, dislodging them. I weeded pesky grass and tree seedlings out of the cracks in my rock walk with the thin responsive blade. 12" long.
9303 Each (1#) $13.00

9304 Widger Indispensable for dividing and separating seedlings, digging them out of plug flats. Very handy for working with small plants in tight places. Amy LeBlanc said we had to carry these. Stainless steel. 6½" long with a ¾" end and a ¼" end.
9304 Each (0#) $3.50



9306 E-Z Digger Everybody raves about this tool. Staffer Carol Doyle used hers to hack parsnips out of the frozen spring ground. MOFGA executive director Russell Libby had to replace his after the first was pressed into service as a mortar trowel. Plow-shaped design features a 7" long 3" wide convex blade tapering to a pointed end. Great for removing deep roots and sod and for cultivating soil. The edge is used for light surface scraping and redistribution of the soil.
9306 Each (1#) $9.50

9307 Garden Rake I thought all garden rakes were pretty much alike until I saw this big one. Hefting it, it seemed too heavy for easy use. Turns out it's balanced so the weight translates into more power and smoother glide in the seed bed you're preparing, not at all like tugging at the soil with a flimsy tool. I've used it only one season, but it seems like it will last a lifetime. Rake is steel, forged in Brazil, 17" long with 16 2½" long teeth. Ash handle made in Tennessee. **New!**
9307 Each (8#) $25.00

9308 Digging Fork A classic solid four-tined fork made by Samuel Parks in England. The forged steel shaft comes high up the handle for ruggedness. Digging forks disturb the soil less than spades and are great for shaking soil out of weed clumps. Split wood D-ring handle for comfortable digging.
9308 Each (5#) $43.00

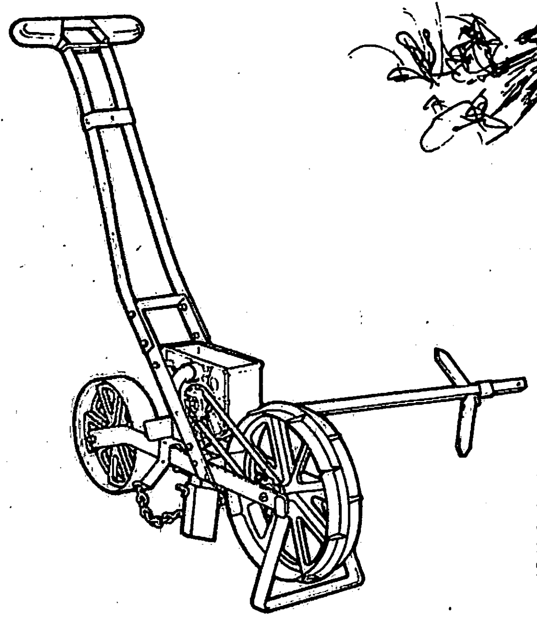
9311 Watering Can Heavy duty 2½ gallon hot-dipped galvanized can, made in England. Fixed handle on top and long spout make pouring well-balanced and easy. Traditional twisted wire spout support. Detachable brass-faced rose rains a shower that doesn't wash away soil or seedlings. Once you've used a good watering can, you won't go back to pouring from jugs and pails.
9311 Each (5#) $33.00

9312 Eco-Spout Turns used plastic containers into watering cans. Adapter fits 1-gallon and half-gallon plastic jugs, and 2-liter soda bottles. When my grandson comes to visit, before saying hello, he grabs the bottle with the Eco-Spout and races out to water the garden. Comes with both a spout and sprinkler attachment which snap on to the adapter. Reuse, recycle and rejoice.
9312 Each (0#) $3.50

9314 Backpack Sprayer Hudson's professional model has a 4-gallon capacity sturdy polypropylene tank and separate pressure tank. 5-year limited warranty. Padded non-absorbent carrying system with waist strap. Can be set up for either right- or left-hand use. Pressures up to 90 psi enable spray to reach high into orchard trees. Nickel-plated brass fittings and heavy-duty chemical-resistant hoses for long life and easy use. Made in the USA. **New!**
9314 Each (0#) $90.00

9315 Hand-held Sprayer 2.75-gallon tank makes this Hudson top-of-the-line sprayer ideal for heavy use in a small farm setting. A few strokes build up working pressure and the occasional pump keeps the spray going. Heavy-duty pressure-molded polyethylene tank is lightweight and extremely durable. 10-year limited warranty. Made in the USA. **New!**
9315 Each (0#) $45.00.

9316 Planter Mist This 1.25-liter pump sprayer is an excellent choice for indoor or outdoor use. A few strokes of the pump builds up enough pressure to mist your seedlings and still keep the cat off the table. We had a lot of fun testing this in the office and it held its pressure for days. Adjusts easily from a fine mist to a spray to a thin stream, and the nozzle unscrews for cleaning. The opening is large enough to fill easily and the body is sturdy polyethylene. Made in China. **New!**
9316 Each (1#) #9.00



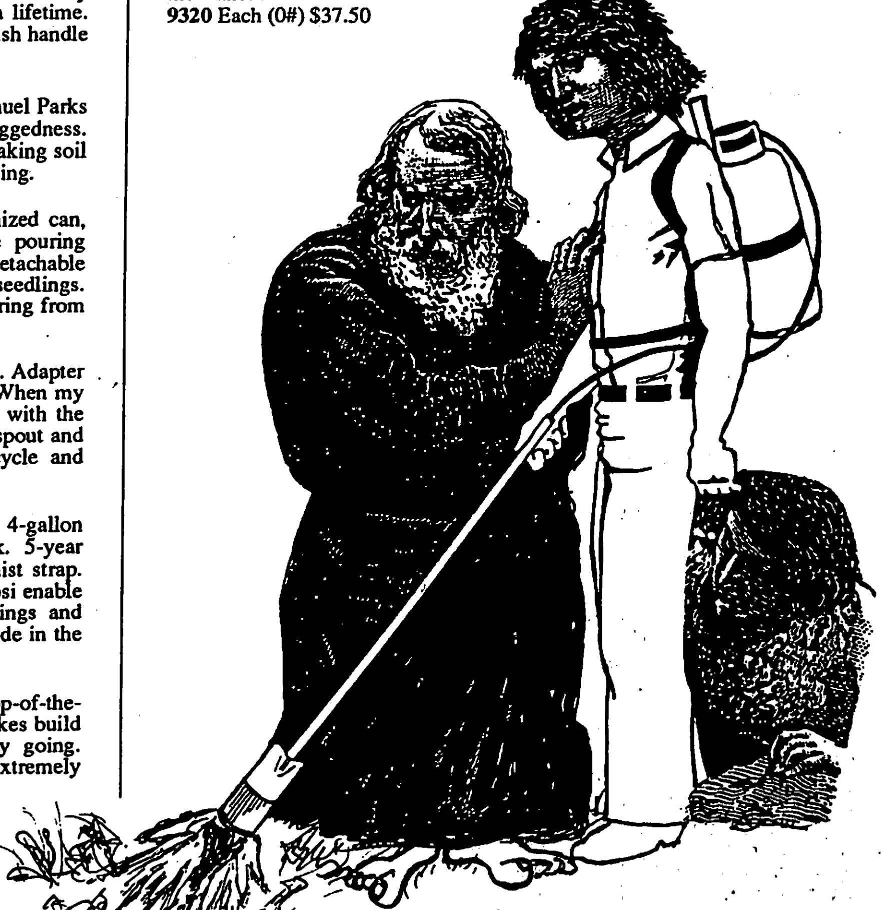
Flame Weeders

Flame weeding has been popular in Europe for over 50 years and was used in this country in corn and cotton fields before the introduction of herbicides. A brief burst from the 2000° flame heats the sap in the cell walls causing them to burst and collapse; the plant wilts and dies a few days later. Especially effective on young annual and perennial weeds, repeated flamings of persistent weeds eventually so discourages them that they pull up roots and die. The flame can also be used for melting ice, burning out web worms and singeing the tops of meringues and crèmes brûlées.

9318 Backpack Weeder Aluminum frame backpack comes with 3-gallon fuel cylinder, 10' hose, regulator, 33" wand rated at 400,000BTU/hr. **New!**
9318 Kit (22#) $230.00

9319 Weed Flamer Wand If you don't plan on walking vast fields while flame-weeding, or if you already own a gas grill. The same 33" wand, 10' hose and regulator as the Backpack weeder to attach to your 3-gallon propane tank. **New!**
9319 Each (0#) $80.00

9320 Squeeze Valve Adjustable valve allows you to set a minimal flow which increases as you squeeze the handle. Keep a pilot flame burning when moving from row to row. A good addition to either the backpack weeder or the wand. **New!**
9320 Each (0#) $37.50



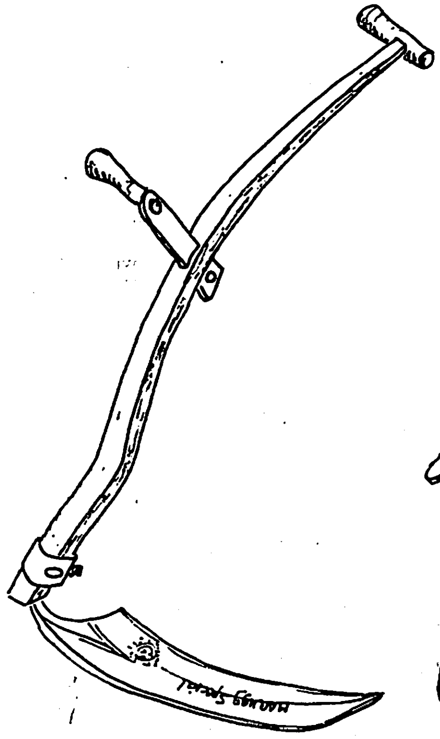
Earthway

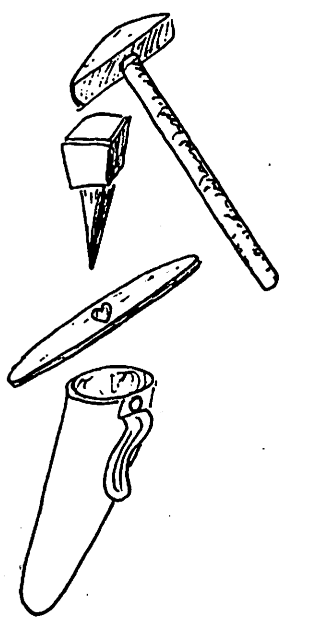
9321 Earthway Vegetable Seeder In one continuous operation the seeder opens the soil, spaces, plants and covers the seed, packs the soil, and marks the next row. Doesn't slice, dice or chop the vegetables for dinner. Reliable performer for the large garden or small farm. Includes 6 seed plates: carrots, beans, corn, peas, radish, and beets. A real time-saver, especially for corn, beans and peas.
9321 Each (0#) $75.00

9322 Fertilizer Attachment Easily attaches to Earthway Seeder for side dressing plants. Fully adjustable to control application of all granulated fertilizers. Reduces the amount of fertilizer spread, quickly paying for itself.
9322 Each (0#) $30.00

9323 Optional Seed Plates Make your Earthway Seeder even more versatile. Package of five plates: brassicas; cucumbers; popcorn; lima beans; and rutabaga and lightly seeding lettuce, carrots and turnip.
9323 Pkg of 5 (0#) $16.00

9324 Earthway Broadcast Spreader Spread seed or fertilizer evenly and accurately. This spreader has a zippered canvas bag and shoulder strap and, most importantly, an enclosed gear box to keep dirt out of the die-cast zinc gears.
9324 Each (0#) $45.00





9331-9334 Scythe Kits Complete kit contains a hammered Austrian Swan pattern blade, a hickory wood snath either curved or straight, whetstone with belt loop carrying case for sharpening during mowing, and hammer and anvil for properly drawing out and hardening the blade. This scythe is wonderfully balanced and a pleasure to use. Comes with a set of thorough instructions and a recommendation from Wendell Berry: "… in my opinion, it is a better tool because it is light, it handles gracefully and comfortably, even on steep ground…" Available with either a 24" grass mowing blade or a 16" bush blade. If you would like to know more about scythes or need to convince your partner about the usefulness of the scythe, check out The Scythe Book by David Tresemer (#6665) in the book section. We now carry the complete kit in stock for pickup customers.

9331 Curved Snath Grass Blade Scythe Kit (0#) $110.00
9332 Curved Snath Bush Blade Scythe Kit (0#) $105.00
9333 Straight Snath Grass Blade Scythe Kit (0#) $107.50
9334 Straight Snath Bush Blade Scythe Kit (0#) $102.50

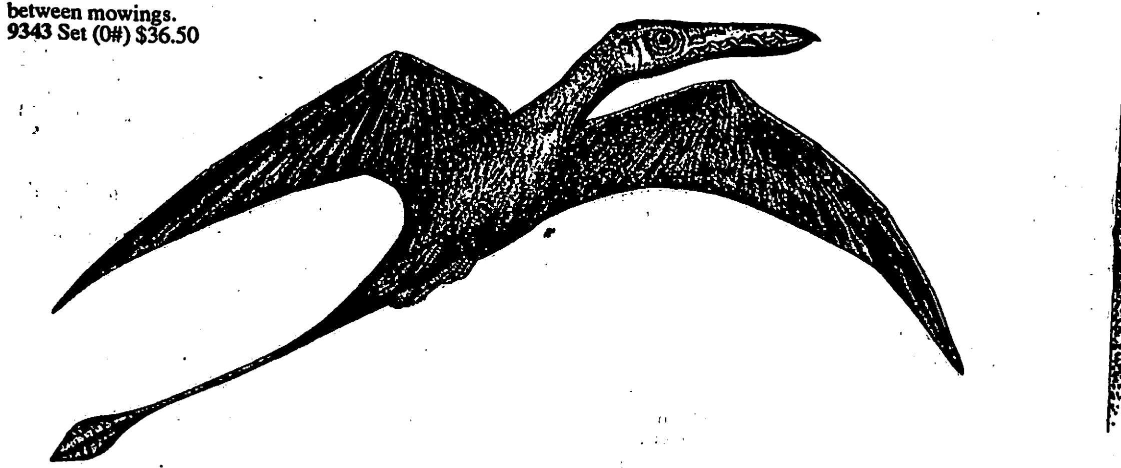
9335-9337 Wooden Snath Just the snath and ring. In three styles.
9335 Curved Snath (5#) $27.25; 9336 Straight Snath (5#) $25.00;
9337 Adjustable Snath (5#) $30.00

9338-9339 Scythe Blade If you already have a scythe and would like an additional blade, you can get either the 24" mowing blade or the 16" bush blade by itself.
9338 Grass Scythe Blade (0#) $49.50; 9339 Bush Scythe Blade (0#) $46.00

9340 Scythe Ring
9340 Each (0#) $6.50

9341 & 9342 Whetstone and Holder Natural Austrian stone, to keep the edge on while mowing. Holder is a plastic case which clips to your belt and holds water to keep the stone ready for use.
9341 Whetstone (0#) $7.00; 9342 Holder (0#) $7.00

9343 Hammer and Anvil Set For those long drawn-out evenings between mowings.
9343 Set (0#) $36.50



9346-9347 Smart Cart We think the Smart Cart is the best garden cart on the market today. The 7 cu ft pan is made of high-density linear polyethylene impregnated with UV inhibitor to protect from sun damage. The pan easily snaps in and out of the tubular aluminum alloy carriage and has no bolt holes so is completely leakproof. Staffer Tom Levesque bought his so that he would have a bathtub. The cart weighs only 35 lbs and has a central balance point so that even when fully loaded it is easy to pull. Doesn't tip over backward. Fedco Trees now owns two Smart Carts, especially for hauling huge loads of wet sawdust. When tilted just right the loaded carts "feel almost empty and they dump real easy, like a dumptruck." We frequently borrow them from Trees. The manufacturer in Windham, ME offers a lifetime warranty. Spare parts are available from us. Assembly takes about half an hour and is a pleasure thanks to the fine quality manufacturing and machining.

Choice of two wheel types: solid rims with 4" wide, 16.6" diameter tires, or spoked rims with 2" wide, 20" diameter tires. The solid rims, rated for 600 pounds, are better for hauling heavy loads over uneven terrain. The spoked wheels, rated for 400 pounds, roll more easily on smooth and level surfaces. The cart will be shipped directly to you from the manufacturer.
9346 Solid rim (0#) $230; 9347 Spoked rim (0#) $230

Keeping Control

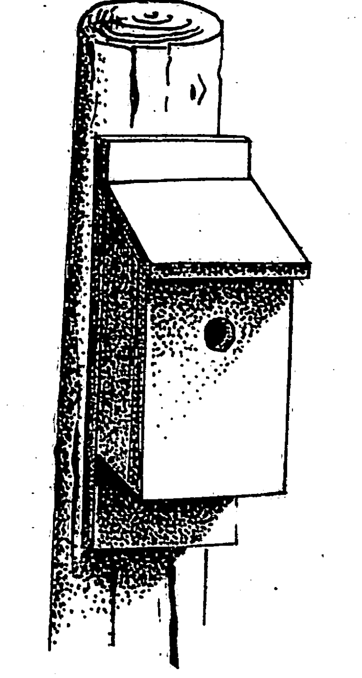
9351 Bird-Scaring Balloon Invented and widely used in Japan, this balloon has multi-colored stripes around a metallic eye. Successfully tested against some of Maine's toughest crows! If you've got too much corn to cover with row cover, this is a good alternative. Most effective if moved around the garden from time to time. Protects a 15-20' radius.
9351 Each (0#) $6.00

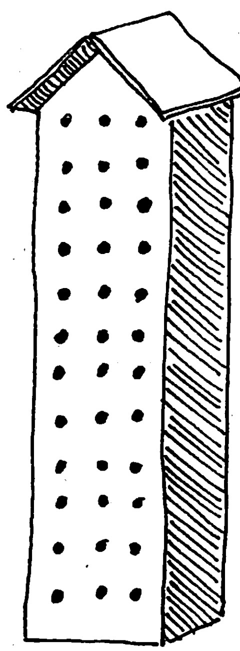
9352 Birdscare Flash Tape Silver and red metalized 7/16"x250' plastic tape is a cost-effective method to protect crops against bird damage. Suspend tape in a loose spiral above the crop. Wind causes tape to flash and flicker resembling fire. Very effective against flocking birds and crows, less so against robins, sparrows and their ilk. Don't apply too early or birds may get accustomed to tape.
9352 Each (0#) $2.50

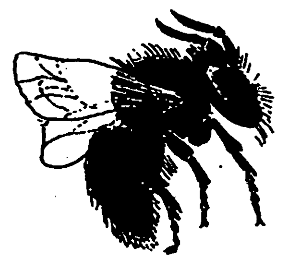
9353 Bird-Scaring Balloon and Birdscare Flash Tape Combo Keep the birds off balance.
9353 Bird-Scaring Balloon and Flash Tape (0#) $7.50

9356 Bat House This sturdy rustic pine bat house comes fully assembled and ready to mount. Designed according to the latest ideas in bat-house architecture with a single ¾x6½x17½" dwelling area. A cozy space for the bats to spend their days resting after a long night of eating your mosquitoes. For more information on bats and how to attract them, write to Bat Conservation International, PO Box 162603, Austin, TX 78716.
9356 1 house (1#) $13.50

9357 Bird House Kit Attract Eastern Bluebirds or Tree Swallows to your yard or garden. Bluebirds are voracious insect eaters, but choosy about nesting areas, preferring a hollow tree at the edge of a field. Development has destroyed many nesting areas, and starlings, a non-native species, migrate here a few weeks before the bluebirds arrive and often take the best spots. The opening on this bird house is too small for the starlings. Designed according to the specifications and recommendations of the Maine Audubon Society and the Cornell Lab of Ornithology, with a clean-out door and a predator-control opening. Requires assembly. Nails and instructions included.
9357 1 kit (1#) $8.00



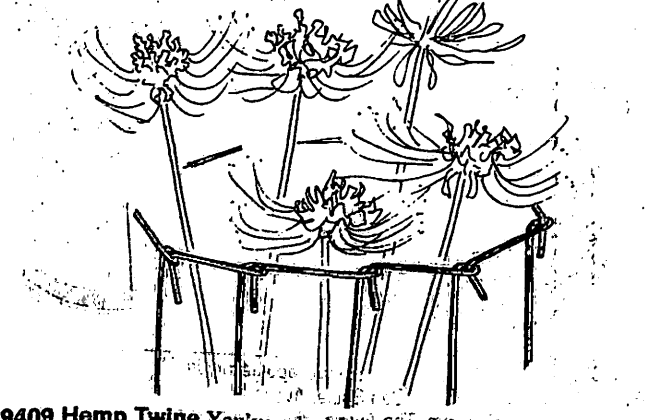




9358 Orchard Mason Bee Hotel Small solitary black ubiquitous and vigorous pollinators, Orchard Mason Bees, *Osmia lignaria lignaria* in the East, can be found across the United States and Canada. They emerge from hibernation after the temperature reaches 50° for several days. Males emerge before the females, for whom they lie in wait. Females emerge, tumble to the ground for a brief frolic, then clean themselves off and begin busily gathering pollen from the flowering shrubs in their neighborhood. It "flits nervously from tree to tree as it forages" (from The Orchard Mason Bee by Brian L. Griffin #5286 in the Fedco Trees & Plants catalog), never flying much more than several hundred feet from its nesting site. Orchard Mason Bees do not excavate their own nesting sites, although they do extensive renovations once they find a home. The Orchard Mason Bee Hotel is a Douglas fir block drilled with 39 mason bee cells. Each cell is home to several eggs. Hanging these blocks in your orchard or on the side of your home will offer an attractive nesting site for this prolific pollinator. **NEW!**
9358 each (1#) $13.00

9401-9402 Single Stem Plant Supports Galvanized steel coated with green plastic, 2' or 3' long with a 2½" eye to hold a plant stem securely. Keep delphiniums, hollyhocks and other tall single-stemmed plants from keeling over.
9401 2' Support, each (0#) $2.25; **9402** 3' Support, each (0#) $2.75

9406-9407 Link-Stakes Corral those wild veronicas and unruly rudbeckias. Pen those pendulous peonies. With a loop at the top of the stem and a link at the end of its arm to hook into another loop, link-stakes can be arranged in rings, squares, lines or any shape you want to support any kind of plant, in groupings large and small. Galvanized steel under green plastic coating designed for years of use. Come in packages of six in two sizes, 18" high with a 7" arm and 30" high with a 15" arm.
9406 18" Link-Stake, pkg. of 6 (2#) $4.50
9407 30" Link-Stake, pkg. of 6 (6#) $15.00



9408-9409 Hemp Twine You've asked for untreated garden twine. Here it is: hemp, grown in Romania. Cut down vines along with their twine and compost the whole tangle. Promote the rediscovery of hemp as a great fiber plant at the same time! Two sizes, 1.5mm twine, to tie up plants and mark rows, and 3mm cord, strong enough for trellises and hop fences. Sold by weight; lengths are approximate. **New!**
9408 1.5mm unfinished twine, 200g/550' (0#) $5.00;
9409 3mm 3-strand cord, 500g/450' (1#) $10.00

Who's Who in the Garden World

9411-9412 Wooden Pot Labels Untreated 5x⅝" wooden sticks for labeling seedlings. Made in Maine.
9411 Pkg of 50 (0#) $2.00; **9412** Box of 1000 (3#) $21.50

9416-9417 Wooden Garden Stakes 12x1⅛x⅛". Large enough to label rows in the garden. Untreated and made in Maine.
9416 Pkg of 25 (0#) $3.25; **9417** Box of 250 (3#) $27.50

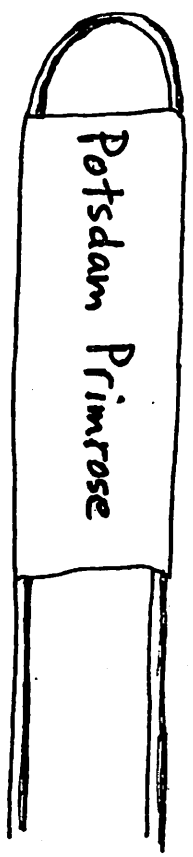
9418-9419 Treated Wooden Garden Stakes We used these stakes, treated with non-toxic white paint, in our trials this year. At the end of the summer, the names stood out clearly and the stakes showed little deterioration where they had been in contact with the soil. 12x1⅛x⅛" **New!**
9418 Pkg of 25 (0#) $3.75; **9419** Box of 250 (3#) $30.00

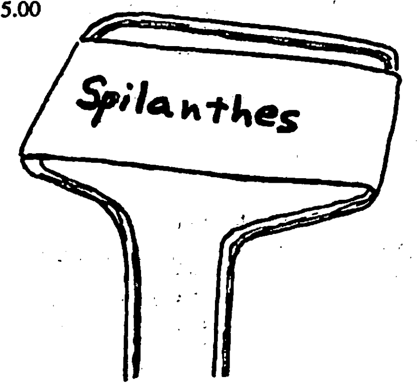
9421-9422 Wooden Field Stakes 18x1⅛x¼". You won't lose this variety marker in the undergrowth. Longer and thicker than the garden stakes, these untreated field markers are easy to spot in the thickest bean bushes. Made in Maine.
9421 Pkg of 25 (1#) $7.50; **9422** Pkg of 100 (5#) $27.50

9431-9437 Plant Markers Zinc-coated nameplates on galvanized steel wire provide permanent outdoor labeling. Available in two styles: the hairpin, a 12" tall slender marker with an extra long ⅞"x3¼" nameplate or the basic cap style marker, 10½" tall with a ⅞"x2½" nameplate. Comes with marking pencil. Now when your friends admire the spilanthes, you'll know what it is.

9431-9432 Hairpin Plant Markers
9431 Pkg of 25 (0#) $11.00; **9432** Pkg of 100 (5#) $35.00

9436-9437 Cap Style Plant Markers
9436 Pkg of 25 (0#) $11.00; **9437** Pkg of 100 (5#) $35.00





9442 Chisel Point Marking Pen Great for writing on garden stakes. Writing will remain clearly visible throughout the season. Black Marks-A-Lot chisel point permanent marker.
9442 Each (0#) $1.00

9443 Fine Point Marker Just the right size for writing on wooden pot labels. Permanent ink won't fade when plants are watered. Black Sharpie.
9443 Each (0#) $1.00

Dividing the Spoils

9501-9502 Seed Envelopes Customers have requested our reclosable seed envelopes to help them break down their bulk orders and to save seed. Here they are, plain with no logo. Two sizes.
9501 2x4" Pkg of 10 (0#) 75¢; **9502** 3x5¹/2" Pkg of 10 (0#) $1.00

9506-9508 Potato Bags For storing or marketing your own spuds. Heavy paper bags with a mesh vent in front to avoid moisture build-up.
9506 5# bag (0#) 25¢; **9507** 20# bag (0#) 45¢; **9508** 50# bag (0#) 70¢

9509 Burlap Bags Burlap bags are heavy duty, untreated and hold 50 lbs. of potatoes.
9509 Each (0#) $1.25

9511 Bag Twister Tool Good way to close up potato bags. Scrunch the top closed and wrap a wire tie around it. Insert hook into loops on the tie and twist. Ties sold separately.
9511 Each (0#) $12.00

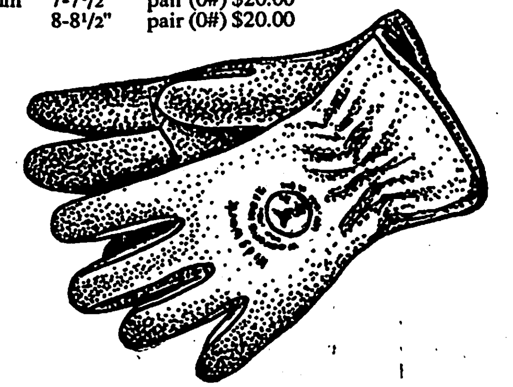
9512 Wire Ties For use with Bag Twister Tool. 5¹/2" long.
9512 Pkg of 100 (0#) $1.50

9516 Rubber Bands 1# pkg. These are #64 size, ¹/4x3¹/2", approximately 460 per lb. Useful for bunching broccoli, dried flowers, carrots, beets, scallions for market.
9516 Each (1#) $5.00

Aid and Comfort

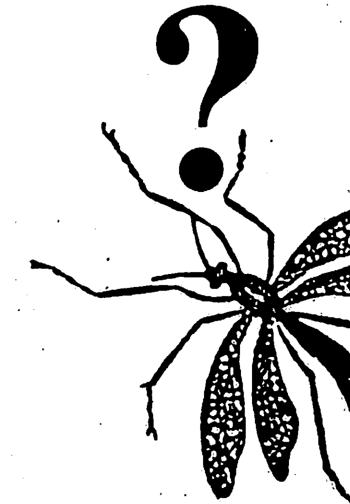
9601-9603 Womanswork Pigskin/Cowhide Gloves for Women My ideal gloves, Susan writes, would be warm and have a comfortable fit. They'd protect my hands working with firewood, rocks, roses and barbed wire, and be soft enough for driving. They'd cost very little and last forever. Womanswork Gloves come darn close to that ideal. They don't last forever, but they give me at least two good years of hard wear. Designed specially to fit women's hands which makes a world of difference in comfort. Combine the flexibility of pigskin with a cowhide palm for extra strength and durability. To size, measure around your knuckles, excluding your thumb.

9601 Small	6-6¹/2"	pair (0#) $20.00
9602 Medium	7-7¹/2"	pair (0#) $20.00
9603 Large	8-8¹/2"	pair (0#) $20.00



9611-9627 Bug Baffler Clothing CR discovered what wonderful garden garments these are when, at the height of black-fly season when sensible folk cringe behind screen doors and the fool-hardy glop themselves with Skin-So-Soft only to be driven mad by the bugs in their eyes, he was able to garden in relative comfort and complete freedom even at dusk when the little six-legged furies are at their most furious. Made of fine-mesh olive-green nylon which keeps the bugs out, allows breezes in and provides chemical-free insect protection. **New!**

9611-9613 Shirt Generously cut one-piece garment with permanently attached roomy headnet has zipper across the front neck seam for access to your face. Elastic band at hips. Sleeves have stretch knit cuffs to fit securely but not uncomfortably.
9611 S/M each (0#) $31.00; **9612** L/XL each (0#) $31.00
9613 XXL each (0#) $33.00



Bug Baffler Size Chart

Weight	Size
90-175 lbs	S/M
175-235 lbs	L/XL
over 235 lbs	XXL

9621-9622 Pants For those days when it's too hot to wear pants, your comfort is limited only by your sense of modesty. The waist is elastic with snap adjustments to take up the slack.
9621 S/M each (0#) $24.50; **9622** L/XL each (0#) $24.50

9626 Headnet Patented hood design allows plenty of room for a hat and seamless construction provides for unobstructed vision. Elastic bands slip under arms to hold the hood securely in place. Perfect for bee observation. One size.
9626 Each (0#) $8.00

9627 Ankle Guards If your socks are like mine, the elastic in them is no longer adequate to hold your pant legs in securely. Ankle guards with stretch knit band at the ankle and elastic band at the calf keep the bugs out of your socks and pantlegs. One size.
9627 Each pair (0#) $8.50

9701 Garden Soap Contains 40% olive oil and no animal fats and is specially formulated for gardeners. The tan 4¹/2 oz. bar is flecked with ground rosemary and is not highly scented. It contains the essential oils of eucalyptus and rosemary to soothe and rejuvenate scratched dry skin. Made in Bowdoinham, Maine.
9701 Bar (0#) $3.50

9703 Bygone Insect Repellent From Lakon Herbals in Vermont, compounded of eucalyptus, rosemary, birch and peppermint oils in a canola oil base. Rated by *Natural Health* as one of the most effective natural outdoor formulas. My daughter spent a comfortable night, camping by New Sharon bog with Bygone as a close companion. Pleasing aroma. Doubles as an herbal massage for sore muscles. Safe for pregnant women and children, does not contain pennyroyal or citronella.
9703 2 oz (0#) $4.50

Avena Botanicals

9705 Fire Fly Balm (Formerly known as Warming Liniment) After a long, windy, cool day of spring planting, nothing pleases like a deeply warming and penetrating liniment. Does not burn the skin. Contains Arnica, Rue, Cayenne, the pure essential oils of Birch, Cinnamon and Peppermint; Beeswax and Self-Heal flower essence. Glass jar with screw-on lid.
9705 1¹/4 oz (0#) $8.50

9711 Heal-All Salve After your hands have been roughened by a day's grubbing in the soil, they need an appointment with an ointment! Soothe them with this salve made from Alfalfa, Basil, Borage, Calendula flowers, Comfrey root and leaves, Plantain, Red Clover blossoms and Self-Heal flower essence. Tin with pop-off lid.
9711 1 oz (0#) $5.50

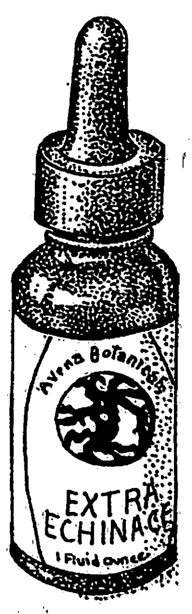
9716 Fairy Flower Formula Puts a spring in your step and a sparkle in your eyes! Avena's special formula includes tinctures of fresh Lady's Mantle, Lemon Balm, Sacred Basil, Borage, Lavender, Comfrey, Heartsease Pansy, and Bee Balm; Cosmos, Calendula and Milkweed flower essences. Take 2-4 drops under your tongue whenever you want to reconnect with the beauty and magic of nature. Glass bottle with dropper.
9716 1 oz (0#) $7.50

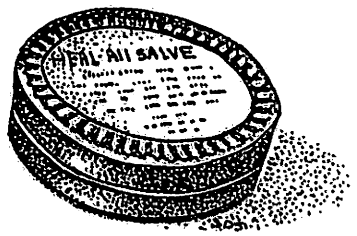
9717 Fairy Flower Face Cream Avena's recipe to soothe, soften and moisturize your skin after it has been buffeted by wind and weather. Contains Comfrey, Calendula, Heartsease Pansy, Linden flowers and Mugwort leaves and flowers in a base of Apricot kernel, Coconut and Almond oils; Vitamin E oil, pure essential oil of Lavender, Rose water and Beeswax. Glass jar with screw-on lid.
9717 2 oz (0#) $7.50

9721 Spring Tonic Eating dandelion greens in the spring is a New England tradition. Spring Tonic contains tinctures of Dandelion root and leaves, Yellow Dock root and leaves, Burdock root and Nettle leaves. As the days grow longer, those first parsnips, scallions and sorrel leaves along with a bit of Spring Tonic can help wake us from our long winter torpor. Glass bottle with dropper.
9721 1 oz (0#) $7.00

9726-9727 Immune Tune An immune system supporter and energy builder widely used by the Fedco staff. A combination of Siberian Ginseng root, Astragalus root, Schizandra berry, Codonopsis root, Prickly Ash bark, Licorice root and Cinnamon bark. 1 oz. glass bottle with dropper; 4 oz. glass bottle with cap.
9726 1 oz (0#) $7.50; **9727** 4 oz (0#) $26.50

9731-9732 Extra Echinacea Tincture of Echinacea angustifolia roots and E. purpurea roots, leaves, flowers and seeds. We take it to ward off cold symptoms when they first appear. 1 oz. glass bottle with dropper; 4 oz. glass bottle with cap.
9731 1 oz (0#) $7.50; **9732** 4 oz (0#) $26.50





Avena Botanicals: A small woman-run herbal apothecary in West Rockport begun in 1985 by herbalist and gardener Deb Soule, Avena has provided herbal health care and wisdom to many Mainers. The Avena fairies hand-tend their delightful gardens with loving care. The attention they give each individual plant resonates through to their products. Planted and harvested with the seasons, sun and moon, certified-organic whole herbs are tinctured, dried, or made into oils and salves for the whole body. We offer selections useful for gardeners as well as remedies oft-used by the Fedco staff. For the complete catalog, please send $2 to Avena Botanicals, 219 Mill St., Rockland, ME 04841.

FEDCO·SEEDS

Co-op Seed Packers

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address service requested

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